

TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1922.

No. 485.

RUSSELL MOTOR CAR COMPANY, APPELLANT,

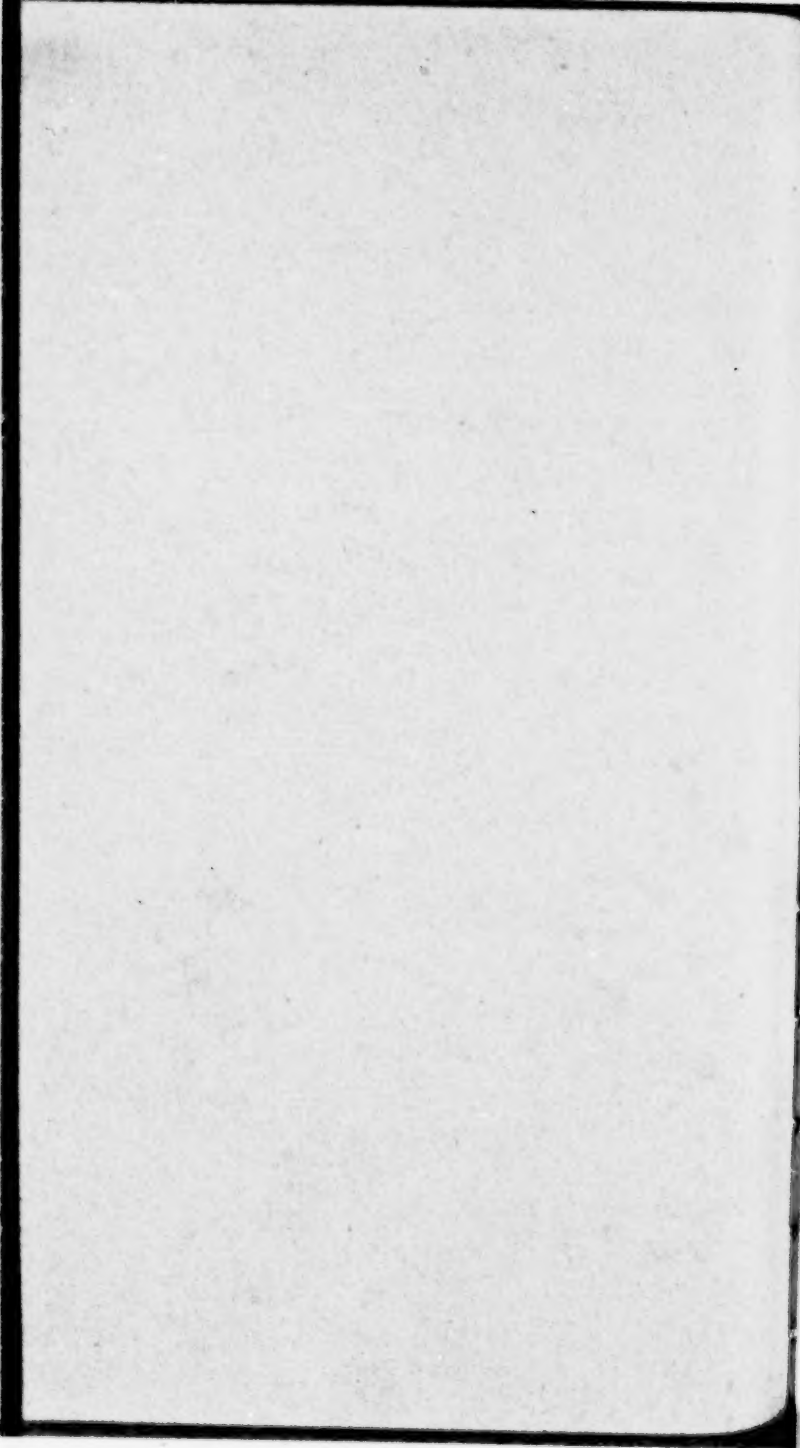
vs.

THE UNITED STATES.

APPEAL FROM THE COURT OF CLAIMS.

FILED JULY 15, 1922.

(29,085)



(29,035)

SUPREME COURT OF THE UNITED STATES.

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vs.

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Court of Claims.

No. 34698.

RUSSELL MOTOR CAR COMPANY

VS.

THE UNITED STATES.

I. History of Proceedings.

On September 14, 1920, the plaintiff filed its original petition.

On October 16, 1920, the defendant filed a demurrer to said petition.

On November 20, 1920, by leave of court, the plaintiff filed an amended petition. Said amended petition is as follows:

II. Amended Petition.

(Filed Nov. 20, 1920.)

To the Honorable the Court of Claims:

The above named claimant, the Russel Motor Car Company, respectfully shows to this Honorable Court:

I.

First. That it now is and at all of the times hereinafter mentioned was a corporation duly created, organized and existing under and by virtue of the laws of the State of Delaware and having a place of business at the City of Buffalo in the State of New York and presents this, its petition and claims, in its own right as such corporation.

2 Second. That heretofore and on or about the 14th day of May, 1918, your petitioner, being duly authorized and empowered by law so to do, made and entered into an express contract, agreement and undertaking with the United States of America, acting by and through the Honorable Franklin D. Roosevelt, then duly acting Secretary of the Navy of the United States and who was duly authorized and empowered by law as aforesaid to make and enter into said contract, agreement and undertaking, and whereby your petitioner undertook, covenanted and agreed to and with the United States of America acting as aforesaid, for the consideration hereinafter mentioned, to manufacture for it 250 3" Anti-Aircraft Gun Mounts, Mark "XI, Modification 2" complete with sights, Mark "XVI, Modification 1" at the agreed price of \$7,860.00 each. That this said agreement, the terms, conditions and deliveries are specifically set forth in a contract which

was referred to in the bills for payment as Dept. No. 1498 and which is fully set forth as Exhibit "A" attached to this petition and made a part hereof and to which your petitioner begs leave to refer, as fully as if herein set forth.

Third. That heretofore and on or about the 3rd day of November, 1917, your petitioner, being duly authorized and empowered by law so to do, made and entered into an express contract, agreement and undertaking with the United States of America, duly acting by and through Honorable Franklin D. Roosevelt, then duly acting Secretary of the Navy of the United States, and who was duly authorized and empowered by law to make and enter into said contract, agreement and undertaking, whereby your petitioner

3 undertook, covenanted and agreed to and with the United States of America acting as aforesaid for the consideration hereinafter mentioned, to furnish and deliver as ordered, 400 3" Anti-Aircraft Gun Mounts, Mark "XI Model 2," complete with sights Mark "XVI, Modification 1 (except telescopes)" at the following dates and at the agreed price of \$8,462.00 each. That said contract was substantially in the same form and contained the same conditions except for the number of gun mounts, the payments and the dates of delivery as said contract hereinbefore referred to in paragraph Second of this complaint and annexed hereto as Exhibit "A" and was known and designated by the defendant and the parties hereto as Dept. No. 949. Paragraph Second of this contract herein referred to as dated November 3rd, 1917, provided among other things:

"Second. The party of the first part will deliver the mounts required under this contract within the period stipulated below, viz:

15 mounts on or before May 15, 1918, and additional mounts as follows:

25 June 15, 1918; 40 July 15, 1918; 50 each August 15, September 15, October 15 and November 15, 1918; and 60 each December 15, 1918, and January 15, 1919."

Fourth. That said contract No. 1498, particularly set out as Exhibit "A" attached to this petition, was duly awarded to your petitioner on or about May 11, 1918, pursuant to a letter received by your petitioner from Franklin D. Roosevelt, duly acting Secretary of the Navy, providing in part as follows:

4 "The Department hereby awards you contract for the furnishing of 250 three-inch anti-aircraft gun mounts for the sum of \$7,860 each; * * * This award is conditional upon your furnishing affidavits that you are not a party to any existing combination in restraint of trade within the prohibition of restrictive provisions of law. A form of affidavit is inclosed for execution and return. * * *

That your petitioner duly furnished to the Navy Department the affidavit upon which the said contract No. 1498 was conditioned. That a formal contract as heretofore alleged was duly made and

signed on or about the 14th day of May, 1918, and thereafter duly delivered to your petitioner.

Fifth. That on or about September 19, 1918, your petitioner wrote to the Bureau of Ordnance of the Navy Department duly acting for and in behalf of the defendant a letter as follows:

"Sept. 19th, 1918.

Navy Dept.,
Bureau of Ordnance,
Washington, D. C.

Attention Commander Reichmuth.

Re Contract 949 for 400 3" anti-aircraft Gun Mounts and Contract 1498 for 250 3" anti-aircraft Gun Mounts.

DEAR SIR:

1. We propose to make deliveries of Gun Mounts as follows:

| | | | | |
|--------|----|---------|---------------|-------|
| June | 5 | Shipped | December | 75 |
| 5 | | | | |
| July | 20 | Shipped | January, 1919 | 75 |
| August | 40 | " | February | 75 |
| Sept. | 50 | " | March | 75 |
| Oct. | 60 | | April | 75 |
| Nov. | 60 | | May | 40 |
| | | | | <hr/> |
| | | | | 650 |

2. We would respectfully ask your permission to allow us to apply all shipments on Mounts on the first contract until same is completed, and then follow with shipments on the second contract. This will greatly simplify the handling of all records and manufacturing of parts in the factory. You will note from deliveries given in the first paragraph that in the month of February the first fifteen mounts would complete contract No. 949 and the balance of 60 mounts to be delivered in February and the deliveries in the months of March, April and May would complete the second contract No. 1498 of 250 mounts.

3. Extension of Contract.—We have been seriously delayed in supplying Gun Mounts in accordance with deliveries outlined in our contracts due to conditions beyond our control, and believe that in connection with contract No. 949 specifying 400 3" anti-aircraft gun mounts that we are entitled to an extension of 90 days.

In regard to our second contract No. 1498 for 250 3" anti-aircraft Gun Mounts, we believe we are entitled to some extension due to difficulties in securing material, but at this time are not prepared to give any idea as to the amount of extension that should be allowed.

We are, in the meantime, proceeding to do everything possible to hurry this work along, and at the proper time will be pleased to discuss with you the matter of extension.

Will you kindly let us have the desired information as soon as possible?

Yours very truly,

RUSSELL MOTOR CAR
CO., INC.,
C. R. BURT,
General Manager.

That on or about September 25, 1918, the Bureau of Ordnance, duly acting for the defendant, by and through Admiral Ralph Earle, Chief of the Bureau of Ordnance, agreed to modify and extend the dates for the delivery of the gun mounts as provided for in said contract referred to as No. 1498, Exhibit "A," attached hereto and to apply all mounts on the said first contract No. 949 until same was completed, and duly wrote the petitioner as follows:

"Navy Department,

Bureau of Ordnance,

Washington, D. C., Sept. 25, 1918.

33901/373 (M2-5)0.

E. A.

Subject: Contr. 949 for 400 3" A. A. Mounts and Contr. 1498 for 250 3" A. A. Mounts.

Reference: (a) Company's letter of Sept. 19, 1918.

SIRS:

Receipt is acknowledged of the company's letter of Sept. 19, containing in the first paragraph proposed schedule of deliveries of mounts on the above contracts.

The Company's request for permission to apply all shipments of mounts on the first contract, No. 949, until same is completed, is approved.

With reference to the company's remark concerning extension of time on contract No. 949; in order that proper consideration may be made to such claims at the expiration of the contract, it is suggested that your company forward the Bureau promptly written notification of specific instances where delays beyond your control have occurred, in accordance with the stipulation mentioned in the contract.

Very truly yours,
(Signed)

RALPH EARLE.

Russell Motor Car Co.,

Via: Naval Inspec. of Ordnance,
Homestead Steel Works,
Munhall, Pa."

That on or about October 11, 1918, your petitioner duly acknowledged to the defendant the extension of time as per the following letter:

"October 11, 1918.

Admiral Ralph Earle,
Navy Dept.,
Bureau of Ord.,
Washington, D. C.

Re: Contr. 949—400 3" A. A. Mounts. Contr. 1498—250 3" A. A. Mounts.

DEAR SIR:

Your letter of Sept. 25th received and note that you will grant our request relative to shipping all of the gun mounts on the
8 1st contract 949 until the order is completed and follow with shipments applying on the second contract.

We thank you for granting us this concession which is entirely satisfactory.

Yours very truly,

RUSSELL MOTOR CAR
CO., INC.,
C. R. BURT,
Gen. Mgr."

That the defendant thereby duly waived and extended and modified the provisions for deliveries as contained in paragraphs or subdivisions "Second" of contracts 949 and 1498 and substituted therefor dates as contained in said letter of September 19, 1918, to the Bureau of Ordnance. That at all the times mentioned herein and in the making and answering of the communications and the arrangements and agreements with your petitioner, the said Admiral Ralph Earle and the said Commander Reichmuth were duly acting within their authority as officers and agents of the said Navy Department of the United States and for the said United States.

Sixth. That under and pursuant to and in accordance with the terms of the said contract referred to in paragraph Second above as Exhibit "A," your petitioner proceeded to expend large amounts of money, incur various obligations with sub-contractors and also arrange for and purchase large amounts of material, machinery, etc., and arrange for and hire large numbers of employees and laborers in connection with and for the purpose of carrying out its said contract.

9 Seventh. That on or prior to October 5th, 1918, your petitioner, in accordance with Subdivision 2 of Paragraph 13 of contract 1498, duly forwarded to said Bureau of Ordnance of the said Navy Department, progress invoice No. 1 in the sum of \$132,621.00, to which your petitioner begs leave to refer and to produce as fully as if said invoice were set out at length and which invoice was duly approved by the Navy Department on behalf of the

defendant and 80% of the amount, the sum of \$106,096.80, was duly paid by the United States on account of contract No. 1498 to your petitioner on or about October 17th, 1918.

That on or prior to November 14th, 1918, your petitioner, in accordance with Subdivision 2 of Paragraph 13 of contract 1498, duly forwarded to the Bureau of Ordnance of said Navy Department progress invoice No. 2 in the sum of \$25,874.00, to which your petitioner begs leave to refer and which invoice was duly approved by the Navy Department on behalf of the defendant and 80% of the amount, the sum of \$20,699.20, was duly paid by the United States on account of contract No. 1498 to your petitioner on or about November 25th, 1918.

That on or about November 20th, 1918, your petitioner, in accordance with subdivision 2 of paragraph 13 of contract 1498, duly forwarded to said Bureau of Ordnance of said Navy Department progress invoice No. 3 in the sum of \$38,140.00, to which your petitioner begs leave to refer, and which invoice was duly approved by the Navy Department on behalf of the defendant and 80% of the amount, the sum of \$30,512.00 was duly paid by the United States on account of contract No. 1498 to your petitioner on or about December 19th, 1918.

That on or about December 7th, 1918, your petitioner in accordance with Subdivision 2 of Paragraph 13 of Contract 1498, duly forwarded to said Bureau of Ordnance of said Navy Department progress invoice No. 4 in the sum of \$33,275.00, to which your petitioner begs leave to refer and which invoice was duly approved by the Navy Department on behalf of the defendant and 80% of that amount, the sum of \$26,620.00, was duly paid by the United States on account of contract No. 1498 to your petitioner on or about December 19th, 1918.

That on or about January 24th, 1919, your petitioner in accordance with subdivision 2 of paragraph 13 of contract 1498, duly forwarded to said Bureau of Ordnance of said Navy Department, progress invoice No. 5 in the sum of \$37,965.00, to which your petitioner begs leave to refer, and which invoice was duly approved by the Navy Department on behalf of the defendant and 80% of the amount, the sum of \$54,372.00, was duly paid by the United States on account of contract No. 1498, to your petitioner on or about February 6th, 1919.

That on or about February 12th, 1919, your petitioner, in accordance with subdivision 2 of paragraph 13 of contract 1498, duly forwarded to said Bureau of Ordnance of said Navy Department, progress invoice No. 6 in the sum of \$6,900.00 to which your petitioner begs leave to refer, and which invoice was duly approved by the Navy Department on behalf of the defendant, and 80% of the amount, the sum of \$5,520.00, was duly paid by the United States on account of contract No. 1498 to your petitioner on or about February 26th, 1919.

Eighth. Your petitioner further avers and charges that on or about November 23, 1918, the United States, duly acting by and through

T. A. Kearney, Acting Chief of Ordnance, Navy Department, on advice and at the direction of the Secretary of the Navy, revoked and cancelled the contract No. 1498 according to a letter sent to your petitioner as follows:

"Navy Department,
Bureau of Ordnance,
Washington, D. C.

Nov. 23, 1918.

36619/44 (M2-6)-0.
EA.

Subject: Contract No. 1498 for 250 3" Mark XI-2 Anti-Aircraft Gun Mounts. Cancellation of contract.

SIRS:

The Secretary of the Navy having authorized cancellation of the Company's contract No. 1498 for 250 3" anti-aircraft gun mounts, the company is hereby directed to cease all work in connection therewith not later than Dec. 2, 1918.

A just and fair settlement will be made as provided by the terms of the contract and in accordance with the statute covering 12 such cases. The details of settlement will be arranged with this Bureau.

The company is requested to submit all claims in detail at an early date. Such material as cannot be absorbed on the company's other contracts or in commercial work, should be carefully inventoried and held for such disposition as may eventually be determined upon.

Acknowledgment of receipt of this letter is requested.

Very truly yours,

T. A. KEARNEY,
Acting.

Russell Motor Car Co.,
93 Dewey Ave.,
Buffalo, N. Y."

That such revocation was without any just, legal or reasonable cause whatsoever therefor, and that the said United States and said Navy Department and its and their officers charged with the duty of carrying out said contract ever since said November 23rd, 1918, have wholly neglected, failed and refused to keep and perform said contract on its part, and have refused and still refuse to allow or permit your petitioner to keep or perform the contract on its part and have refused and still refuse to allow your petitioner to furnish or deliver any mounts or to make, realize, obtain or receive any compensation, profit or gain whatsoever therefor or to carry out the obligations on the part of the United States as provided in said contract Exhibit "A."

Ninth. Your petitioner further avers and charges that in order to carry out said contract, it became and was justly and thoroughly prepared and equipped with all of the necessary buildings, rooms, offices, apartments, machinery, apparatus, appliances, labor and employees and with means by which fully and completely duly to execute and to perform said contract and that your petitioner was then and at all times thereafter has been, fully prepared, able, willing and anxious to keep and perform said contract and all and singular its covenants, stipulations, conditions and provisions; to make, furnish and deliver all of the gun mounts and parts incidental thereto and connected therewith as provided in said contract to be made and furnished and to deliver the same at the times and in the manner agreed upon and provided for between your petitioner and the said United States as set forth herein and to otherwise do, keep and perform all of the covenants, agreements, stipulations and conditions in said contract number 1498 attached as Exhibit "A" hereto and to be kept and performed by your petitioner on its part. Your petitioner has heretofore duly complied with and performed all the conditions on its part to be performed in and by said contract number 1498 and in the performance of the said contract number 1498 it could have utilized and employed its said buildings, machinery and labor in the making and delivery of gun mounts and articles provided for in said contract number 1498 and could have thereby made, realized and received a just, fair, and reasonable compensation and lawful profit for such use and employment and thereby have become entitled to the full contract price for the said gun mounts as provided in said contract. Your petitioner further shows upon information and belief that if it had been permitted and allowed to keep and perform said contract and to make and deliver said gun mounts and material provided for in said contract, it could and would have thereby made, realized and received at the price aforesaid, a just, fair, and reasonable compensation, lawful profit and gain per gun mount therefor over and above the cost and expense of making and delivering the same and that your petitioner was deprived of the said compensation, lawful profit and gain by the United States as hereinbefore and hereinafter stated.

Tenth. That your petitioner, at the time that the said contract number 1498 Exhibit "A" attached hereto was cancelled and work thereunder stopped for and in behalf of the United States as aforesaid, was making and delivering gun mounts, sights and other material as provided in said contract and in and under said contract made and dated November 3rd, 1917, referred to above and was, therefore, familiar and knew the cost and expense necessary for the manufacture of the said gun mounts. That the reasonable and actual cost to the petitioner for the manufacture and delivery of the gun mounts and sights and for its full and due compliance, with all the terms to be performed on its part of said contract No. 1498, Exhibit "A," attached hereto, would have been reasonably of the sum of in or about \$1,010,767.50 and as above stated. The full contract price

15 for the said gun mounts was \$1,965,000 as provided in said contract number 1498 and by reason of the aforesaid cancellation on the part of the defendant and its refusal to permit your petitioner to perform its said contract, on these items alone your petitioner was and is damaged in or about the sum of \$954,232.50.

Eleventh. That in addition to said items of damage and loss to your petitioner aforesaid, and in connection with the work done on this contract in supplying finished and semi-finished parts, raw materials, stationery supplies, packing and shipping, installation of machinery, miscellaneous charges and adjusting contracts with subcontractors, your petitioner was further damaged and expended at the request of and for the benefit of the United States, the sum of \$290,332.34, the details of which sum are set out in schedule attached to this petition and marked Exhibit "B" and made part and parcel thereof and to which your petitioner begs leave to refer as if set forth in full herein.

Twelfth. That your petitioner heretofore and or about the 26th day of March, 1920, the 31st day of March, 1920 and the 1st day of April, 1920, duly sold and delivered to the defendant, the United States, under the circumstances and facts hereby and elsewhere alleged in this petition and as one of the results of the cancellation of its contract No. 1498 as aforesaid, and the transactions between your petitioner and the United States relating thereto and springing therefrom, through the Navy Department and the proper officials thereof duly acting for said Navy Department and the said United states, at the request and upon the order of the said Navy Department and in accordance with instructions duly given from the Chief of Ordnance of the Navy Department who was acting under the due authority of the defendant, certain supplies, tools, jigs and fixtures, a detailed description whereof is set out in Exhibit "C" hereunto annexed and made a part hereof as if set forth in full herein, which said supplies, tools, jigs and fixtures had theretofore been purchased by your petitioner for the purpose of carrying out the said contract No. 1498 with the said United States and were duly delivered to the defendant at and for an agreed price of \$52,709.21, which said price was fair and reasonable and that by virtue of the premises, the said United States duly owes your petitioner therefor and has not heretofore paid your petitioner the said sum or any part thereof although lawfully obligated so to do.

That in accordance with the work of manufacturing the said gun mounts under said contract No. 1498, your petitioner was required to and did purchase certain machinery necessary and material for the completion of this work of the reasonable value and cost of \$81,262.00, the items of which are set forth in Schedule "D" attached to this petition and made part and parcel thereof; that said machinery was and is of no value to your petitioner for any work outside of this said contract; that your petitioner offered to sell the same to the United States, which offer was refused, and that your petitioner sold

the same on the open market and at the best terms possible for the sum of \$57,078.25, thereby causing a further loss and damage to your petitioner of the sum of \$24,183.75 by reason of the cancellation of the said contract, Exhibit "A," as aforesaid.

Thirteenth. That the total loss and damage to your petitioner by reason of the said cancellation of the said contract and the requisition, use and acquisition of the various materials, tools and appliances as hereinbefore set forth and by reason of the various matters hereinabove set forth, was the sum of \$1,321,457.80 and that no part thereof has been paid nor are there any offsets or counterclaims thereto excepting the sum of \$243,820.00 heretofore paid by the United States as above set forth and there is now justly due and owing to your petitioner from the said United States, the sum of \$1,077,637.80, for which said sum demand has heretofore been duly made upon and refused by the defendant, the United States, and the officers and agents thereof, thereunto authorized to act.

Fourteenth. Your petitioner further avers and charges that no action has been taken on its claim in Congress. That your petitioner prior to the institution of this suit and after the cancellation of the said contract duly presented to the United States, the President thereof and to the Secretary of the Navy of the United States, duly authorized to pay and make settlement for the sums to which your petitioner was and is justly entitled, acting for and in behalf of the said defendant

United States, the President thereof, and the Secretary of the Navy, its claim for damages and moneys and fair, reasonable and just compensation and profits to which it was lawfully entitled for the various items and matters hereinbefore set forth; that the said United States and the said Secretary of the Navy of the United States, acting for and in behalf of the said United States and the President thereof, pursuant to authority duly delegated to him, heretofore and on or about May 20th, 1920, determined that your claimant was only entitled as just compensation for the various matters and items hereinbefore set forth, to the sum of \$483,483.56, and so advised your petitioner in writing and in all other respects the said United States, its President and the said Secretary of the Navy denied your petitioner's claim as in this petition set forth; that your petitioner, and it alone, is the true and lawful owner of the said claim; that no assignment or transfer of the said claim or any part thereof or interest thereon has been made; that your petitioner, this claimant, is justly entitled to the sum of \$1,077,637.80 from the United States after allowing all just credits and offsets; that your petitioner, the Russell Motor Car Company, created, organized and existing as aforesaid, has at all times borne true allegiance to the Government of the United States and that it is a citizen of the United States and it has not in any way voluntarily aided, abetted or given encouragement to rebellion against the said Government and your petitioner verily believes the facts stated in this petition to be true.

18a

II.

The above named claimant, the Russell Motor Car Company, for a second separate statement of its claim, respectfully shows to this Honorable Court:

Fifteenth. Your petitioner hereby repeats and re-alleges and makes a part hereof as if set forth in full herein, paragraphs or sub-divisions of this petition hereinbefore set forth numbered and entitled "First," "Second," "Third," "Fourth," "Fifth," "Sixth," "Seventh," "Ninth," "Tenth," "Eleventh," "Twelfth," "Thirteenth" and "Fourteenth."

Sixteenth. Your petitioner further avers and charges that on or about November 23, 1918, the United States, and the President thereof, duly acting by and through T. A. Kearney, Acting Chief of Ordnance, Navy Department, on advice and at the direction of the Secretary of the Navy, revoked and cancelled the contract No. 1498 according to a letter sent to your petitioner as follows:

"Navy Department,
Bureau of Ordnance,
Washington, D. C.

Nov. 23, 1918.

36619/44 (M2-6)-0,
E. A.

Subject: Contract No. 1498 for 250 3" Mark XI-2 Anti-Aircraft Gun Mounts. Cancellation of contract.

18b SIRS:

The Secretary of the Navy having authorized cancellation of the Company's contract No. 1498 for 250 3" anti-aircraft gun mounts, the company is hereby directed to cease all work in connection therewith not later than Dec. 2, 1918.

A just and fair settlement will be made as provided by the terms of the contract and in accordance with the statute covering such cases. The details of settlement will be arranged with this Bureau.

The Company is requested to submit all claims in detail at an early date. Such material as cannot be absorbed on the company's other contracts or in commercial work, should be carefully inventoried and held for such disposition as may eventually be determined upon.

Acknowledgment of receipt of this letter is requested.

Very truly yours,

T. A. KEARNEY,
Acting.

Russell Motor Car Co.,
93 Dewey Ave.,
Buffalo, N. Y."

Your petitioner in due form and manner complied with the request of the United States, the President thereof, the Secretary of the Navy and of T. A. Kearney, acting for the said Navy Department in said letter just hereinbefore set forth and submitted its claims for the various matters and items hereinbefore set forth and in 18c and by virtue of which, as just compensation, it was entitled to receive from the United States the sum of \$1,321,457.80, that the said Secretary of the Navy on or about the 20th day of May, 1920, theretofore being duly authorized and empowered to act for and in behalf of the United States and the President thereof, then and there determined that your petitioner was only entitled to receive as just compensation, the sum of \$483,483.56 on account of the cancellation of its said contract, for the materials requisitioned, acquired and used and other matters for which your petitioner asks compensation as hereinbefore set forth and so advised your petitioner in writing and that no part of said sums have been paid except the sum of \$243,820.00 as hereinabove set forth; that the said Secretary of the Navy acting for and in behalf of the said United States and the said President thereof, in determining the just compensation as aforesaid, at the sum of \$483,483.56, refused to consider and include in said just compensation to which your petitioner was and is lawfully entitled, any allowance and any compensation and any damages measured by the difference between the said contract price and the reasonable cost to your petitioner for the full performance of the said contract on its part and refused to include in said compensation any reasonable and lawful profit which your petitioner might reasonably have made if said contract had not been cancelled as aforesaid, and your petitioner had been permitted to fully carry out the same on its part, making all proper allowance and deduction 18d for the cost of the performance of the said contract. Said refusal to consider or make allowance for these said matters just hereinabove mentioned in the said determination of the said purported just compensation by the said Secretary of the Navy, duly acting for the United States and the President thereof, was and is illegal and unlawful and is unsatisfactory to your petitioner and said refusal to make any allowance and consider said items of compensation and damages as aforesaid, substantially accounts for the difference in the amount of your petitioner's claim heretofore duly presented as aforesaid, and suit whereon is brought hereby, and the amount which the said United States, the President thereof and the Secretary of the Navy, as aforesaid, purported to determine as the just compensation to which your petitioner was only entitled.

Seventeenth. That the total loss and damage to your petitioner by reason of the said cancellation of the said contract and the requisition, use and acquisition of the various materials, tools and appliances as hereinbefore set forth and by reason of the various matters hereinabove set forth, was the sum of \$1,321,457.80 and that no part thereof has been paid nor are there any off sets or counterclaims thereto excepting the sum of \$243,820.00 heretofore paid by the United States as above set forth and there is now justly due and owing to your petitioner from the said United States, the sum of \$1,077,637.80, for

18c which said sum demand has heretofore been duly made upon and refused by the defendant, the United States, and the officers and agents thereof, thereunto duly authorized to act.

Wherefore, your petitioner demands judgment against the United States in the sum of \$1,077,637.80.

RUSSELL MOTOR CAR
COMPANY,

Claimant,

By WILLIAM G. RUSSELL,

Treasurer.

STATE OF NEW YORK,

County of Erie,

City of Buffalo, ss:

William G. Russell, being duly sworn, deposes and says: I am the treasurer of the claimant corporation in this case. I have read the above amended petition and the matters therein stated are true to the best of my knowledge and belief.

WILLIAM G. RUSSELL.

Subscribed and sworn to before me this 15th day of November, 1920.

A. M. WALDOW,

Notary Public in and for Erie County, N. Y.

19

EXHIBIT A.

(All public bills for payment under this contract should include a reference to Dept. No. 1498.)

Russell Motor Car Company Contract for Two Hundred and Fifty 3-inch Anti-air Craft Gun Mounts Mark XI, Mod. 2, with Sights Mark XVI, Mod. 1 (Except Telescopes).

This contract, of two parts, made and concluded this fourteenth day of May, A. D., 1918, by and between Russell Motor Car Company, a corporation organized under the laws of the State of Delaware, and doing business at Buffalo in the State of New York, represented by the Vice-President of said company, party of the first part, and The United States, party of the second part:

Witnesseth, that for and in consideration of the payments to be made, as hereinafter provided, the party of the first part hereby covenants and agrees to and with the party of the second part as follows—that is to say:

First. The party of the first part will, at its own risk and expense, manufacture and deliver to the Navy Department, in conformity with and subject to the conditions stated in the specifications—Ordinance Pamphlets 400, 400-C, and 400-D and the drawings as listed

on sketches Nos. 6691, 6695, 6818 and 7227, which specification and drawings, hereto annexed, shall be deemed and taken as forming a part of this contract with the like operation and effect as if they were incorporated herein, two hundred and fifty (250) 3-inch anti-aircraft gun mounts Mark XI, Mod. 2, complete with sights Mark XVI, Mod. 1 (except telescopes) at \$7,860.00 each; spare parts to be furnished in accordance with list No. 8942-8 at prices to be agreed upon, which shall be based upon the manufacturers' cost records, provided that the unit value in each case shall not exceed the proportionate cost of similar part furnished in completed mount, said spare parts to be paid for upon delivery.

Such mounts (the word mount as used throughout this contract being intended to include the mount complete, with sights (except telescopes) shall be delivered free on board at the works of the party of the first part, consigned as may be directed by the party of the second part.

Second. The party of the first part will deliver the mounts required under this contract within the periods stipulated below, viz. 10 mounts on or before October 31, 1918, and additional mounts as follows:

15 November 30, 1918; 20 December 31, 1918;

25 January 31, 1919; 60 February 28, 1919;

60 March 31, 1919; and 60 April 30, 1919.

But a lien in favor of the party of the second part upon said mounts and the material on hand for use in the manufacture thereof, respectively and collectively, for all moneys paid on account thereof, shall begin with the first payment, and shall thereupon attach to the work done and the materials furnished, and shall, in like manner, attach from time to time, as the work progresses, and as further payments are made, and shall continue until it shall have been properly discharged, and said lien is, pursuant to the provisions of the act of August 22, 1911, paramount.

Third. It is hereby agreed that time is an essential feature of this contract, and that, if the party of the first part shall fail to deliver the said mounts within the periods prescribed therefor, including such extensions thereof, if any, as may be granted by the party of the second part as hereinafter provided, the party of the second part will be damaged thereby; and the amount of said damages being difficult of definite ascertainment and proof, it is hereby agreed that the amount of said damages shall be agreed upon, liquidated, and fixed in advance; and it is hereby agreed upon, liquidated and fixed, and the party of the second part shall make deductions from the price herein stipulated, at the rate of one-tenth of 1 per cent of the contract price of each mount for each day such mount shall remain undelivered after the expiration of the period prescribed for delivery hereunder, all such deductions to be made from time to time as liquidated damages from any payment or payments falling due under this contract; provided, That no liquidated damages shall be deducted for such period, after the expiration of the time or times

prescribed for delivery of the mounts, as in the judgment of the party of the second part shall equal the time that, either in the beginning or in the prosecution of the deliveries, shall have been lost on account of any cause for which the United States is re-

22 sponsible, or on account of strikes, riots, fire, or other disaster, delays in transit or delivery on the part of transportation companies, or other circumstances beyond the control of the party of the first part, but such circumstances shall not be deemed to include delays on the part of sub-contractors in furnishing materials when such delays arise from causes other than those herein specified: and provided further, That the question whether delays are due to causes herein specified shall be determined by said party of the second part.

In case any question shall arise under this contract concerning deductions for delay, such question, with all the facts relating thereto, shall be submitted to the Secretary of the Navy, whose decision thereon shall be final and binding upon the parties hereto unless, within a year after notification of the amount found due by the Navy Department in final settlement hereunder, the party of the first part shall bring suit to recover any further amounts claimed to be due.

Fourth. All delays that the party of the second part shall find to be properly attributable to any of the causes for which penalties would not be deducted in accordance with the provisions of the third clause hereof, and to have been delays operating upon the delivery of the mounts within the time herein prescribed therefor, shall entitle the party of the first part to a corresponding extension of such time: provided, however, That no such delay, nor the alleged cause

23 or causes thereof, shall be considered by the party of the second part unless the party of the first part shall, at the time of the occurrence of such delay, notify the party of the second part in writing of the facts and circumstances in each case, and of the extent to which the party of the first part claims that the deliveries are thereby delayed.

Fifth. In order that all parts of the mounts to be manufactured under this contract may be interchangeable, the furnishing of jigs, gauges and templates will be governed by Paragraph One of specifications, Ordnance Pamphlets 400-C, and 400-D, the necessary patterns to be furnished by the party of the first part.

Sixth. The provisions of this contract and the conditions and requirements of the drawings and specifications hereinbefore referred to may be changed by the party of the second part, and if changes are thus made the actual cost thereof and the damage, if any, caused thereby, and the amount of the increased or diminished compensation, if any, that the party of the first part shall be entitled to receive in consequence of such change or changes, shall be estimated by the naval inspector at the works of the party of the first part, and if less than five hundred dollars (\$500) shall be determined by him, subject to the approval of the Chief of the Bureau of Ordnance; if equal to or greater than five hundred dollars (\$500) the same shall be de-

terminated by a board of not fewer than three naval officers to be appointed by the Secretary of the Navy, and the determination of said board or a majority thereof shall be subject to the approval of the said Secretary. The determination of said inspector or of said board as to the amount of the increased or diminished compensation the party of the first part shall be entitled to receive, if any, in consequence of such changes, shall, when approved by the Chief of the Bureau of Ordnance, or by the Secretary of the Navy, as hereinbefore provided, be binding upon the party of the first part, subject, however, to appeal to the Secretary of the Navy from any decision by the Chief of the Bureau of Ordnance. Provided, That no such change shall be made when the difference in cost resulting therefrom shall, in the execution of the work, exceed five hundred dollars (\$500), except on the written order of the Secretary or the Assistant Secretary of the Navy.

Seventh. If at any stage of the work prior to the completion and delivery of said mounts, the party of the second part shall find that the party of the first part is unable or fails to proceed with or to make satisfactory progress in the manufacture and delivery thereof, or if at the end of any period prescribed in the second clause hereof, including such extensions of time, if any, as shall have been granted under the fourth clause hereof, any of the mounts required within such period shall, through fault of the party of the first part, remain undelivered, then and in such case it shall be optional with the party of the second part to declare this contract forfeited on the part of the party of the first part. In case such forfeiture is declared the title to the mounts required under this contract, and to all materials on hand applicable thereto, shall forthwith vest in the party of the second part, subject, however, to rejection as hereinafter provided for; and said mounts and materials shall on demand be surrendered to the party of the second part. The Secretary of the Navy shall thereupon cause to be taken and filed a full and complete statement and inventory of all work done or commenced in, upon, or about said mounts, and of all said materials and shall cause the same to be duly valued by a board consisting of not fewer than five persons, qualified by knowledge and experience for the discharge of their duties, to be appointed by the Secretary of the Navy, which board shall proceed without unnecessary delay to examine such work and materials and ascertain and declare the fair market value thereof, the contract price being taken as the fair market value of the completed articles, and upon such examination the party of the first part may attend, by representative, and, if it so desires, by counsel, and submit such evidence as the board may deem proper.

Upon approval of the report of said board by the Secretary of the Navy, the party of the second part may proceed to complete according to the contract, with such changes as may be found necessary or desirable, in such manner and by such means as it may deem advisable, all the mounts required under this contract. Should the total cost of the work, making due allowance for authorized changes

therein, exceed the contract price, the difference shall be charged to the party of the first part, who covenants and agrees to pay the same on demand. Should such cost be less than the contract price, the party of the first part shall be paid the amount found by the board mentioned above to be the value of the work done and material provided by the party of the first part, less previous payments to it and any other credits in favor of the party of the second part hereunder: Provided, That no allowance shall be made for profit that the party of the first part might have made by completing the work or for any excess of the contract price over the final total cost of the work; and that the party of the second part may before payment require satisfactory evidence that there exists no liens or rights in rem against the mounts or any part thereof or any materials incorporated thereon.

In case the party of the second part should, however, decide not to proceed with the completion of said mounts or any of them, the same shall be rejected and the party of the first part shall thereupon and upon notice thereof in writing be justly indebted to the party of the second part as and for liquidated and ascertained damages in a sum equal to the aggregate amount of all payments theretofore made to it for or on account thereof, and agrees to refund said amount on demand, and that the party of the second part shall and may hold as collateral security for such refund, said mounts or so much thereof as shall have been completed and all materials on hand applicable thereto.

Eighth. Notwithstanding any license the department may be held to have by reason of the provisions of the act of Congress entitled

“An act to provide, additional protection for owners of patents of the United States, and for other purposes,” approved June 25, 1910, to use patented inventions the contractor will hold and save the department harmless from and against all liability, and all and every demand or demands of any nature or kind heretofore made or that shall hereafter be made for or on account of the adoption of any plan, model, design, or suggestion, or for or on account of the use of any patented invention, article, or appliance that has been or may be adopted or used in or about the manufacture or production of the articles or materials, or any part thereof, to be furnished under this contract, and the contractor will not urge or claim the terms of said act or any interpretation thereof as a release from or waiver of the force or the effect of the foregoing stipulation, with the exception, however, of such patented inventions, articles, or appliances, if any, as may be incorporated in the designs, drawings, or specifications of the mounts to be manufactured hereunder which are to be furnished by the party of the second part, full responsibility as to which is assumed by the United States.

Ninth. Should any mount fail in the firing test it must be replaced within a reasonable limit of time, to be determined by the party of the second part, subject to deductions for delays already accrued thereon, or which may accrue after the expiration of the ex-

tended time for replacing the mount; and the rejected mount may be removed at the expense and risk of the party of the first part who will also reimburse the Government for any expense of transportation that may have been incurred thereon.

28 Tenth. This contract shall not, nor shall any interest herein, be transferred by the party of the first part to any other person or persons; and in the performance of this contract no persons shall be employed who are undergoing sentences of imprisonment at hard labor.

Tenth (a). In addition to the ordinary precautions heretofore adopted by the contractor for the guarding and protection of its plant and work, the contractor shall provide such additional watchmen and devices for protection of its plant and property and the work in process for the Navy Department against espionage, acts of war and of enemy aliens as may be required by the Secretary of the Navy. The contractor shall, when required, report to the Secretary of the Navy the citizenship, country of birth or alien status of any and all of his employees. When required by the Secretary of the Navy, he shall refuse to employ or if already employed forthwith discharge from employment and exclude from his works any person or persons designated by the Secretary of the Navy for cause as undesirable for employment on work for the Navy Department.

Eleventh. No member of or delegate to Congress, officer of the Navy, or person holding any office or appointment under the Navy Department, is or shall be admitted to any share or part of this contract or to any benefit to arise therefrom.

29 Twelfth. Subject to the conditions enumerated in section 2 of the eight-hour law of June 19, 1912, no laborer or mechanic doing any part of the work contemplated by this contract, in the employ of the contractor or any subcontractor contracting for any part of said work contemplated, shall be required or permitted to work more than eight hours in any one calendar day upon such work. For each violation of this provision a penalty of five dollars shall be imposed for each laborer or mechanic for every calendar day in which he shall be required or permitted to labor more than eight hours upon said work, and the amount of any such penalties shall be withheld for the use and benefit of the United States from any moneys becoming due under this contract, whether the violation of this provision is by the contractor or any subcontractor. (Subject to the provisions of Executive Order No. 2559-A of March 24, 1917.)

Thirteenth. The party of the second part, in consideration of the premises, does hereby contract, promise, and engage to and with the party of the first part as follows:

1. The price to be paid for the mounts to be manufactured and delivered as aforesaid shall be the price therefor as stated in the first clause of this contract.

2. Payment under this contract shall be made as follows, viz.: partial payments from time to time as the work progresses, in accordance with a schedule to be submitted by the contractor and approved by the Bureau of Ordnance, provided that from the last payment or payments becoming due hereunder there shall be reserved the sum of ten thousand dollars (\$10,000).

3. No payment shall be made except upon bills certified by the inspector in such manner as shall be directed by the Chief of the Bureau of Ordnance, whose final approval of all bills thus certified shall be necessary before payment thereof.

4. All warrants for payments under this contract shall be made payable to the party of the first part or its order.

5. When a payment is to be made under this contract as a condition precedent thereto, the Secretary of the Navy may, in his discretion, require evidence satisfactory to him to be furnished by the party of the first part, showing what, if any, liens or rights in rem of any kind against said mounts or the material on hand for use in the construction thereof have been or can be acquired for or on account of any work done or material already incorporated as a part of said mounts, or on hand for that purpose; but it is hereby further stipulated, covenanted and agreed, by the party of the first part for itself and on its own account and for and on account of all persons, firms, associations and corporations furnishing labor and materials for said mounts, and this contract is upon the express condition, that no lien or rights in rem of any kind shall lie or attach upon or against said mounts, or the materials therefore, or any part thereof, or of either, for or on account of any work done upon or about said mounts, or materials, or of any materials furnished therefor or in connection therewith, nor for or on account of any other cause or thing or of any claim or demand of any kind, except the claims of the department.

6. When all the conditions, covenants, and provisions of this contract shall have been performed and fulfilled by and on the part of the party of the first part, said party of the first part shall be entitled, within ten days after the filing and acceptance of its claim to receive the amount reserved, as aforesaid, or so much thereof as it may be entitled to, on the execution of a final release to the United States, in such form and containing such provisions as shall be approved by the Secretary of the Navy, of claims against the United States arising under or by virtue of this contract.

Fourteenth. If any doubts or disputes arise as to the meaning of anything in this contract or in the drawings or specifications aforesaid, or if any discrepancy appear between said drawings or specifications and this contract, the matter shall be at once referred to the Secretary of the Navy for determination; and the party of the first part hereby binds itself to abide by his decision in the premises.

Fifteenth. This contract having been awarded, conformably to restrictive provisions in the Naval Appropriation act of March 4,

1917, upon the express understanding that the party of the first part is not a party to any existing combination or conspiracy to monopolize the interstate or foreign commerce or trade of the United States or the commerce or trade between the States and any Territory or the District of Columbia in structural steel ship plates, armor, armament, or machinery, and the party of the first part having furnished the Secretary of the Navy with an affidavit to this effect, it is hereby further covenanted and agreed, and this contract is upon the express condition, that in case it be ascertained at any time after the signing hereof that false representations were made in said affidavit with respect to the requirements referred to above of said statute, this contract may be annulled in whole or in part by the Secretary of the Navy at his discretion.

In witness whereof, the respective parties hereto have hereunto set their hands and seals the day and year first above written.

RUSSELL MOTOR CAR COMPANY,
By T. A. RUSSELL,

Vice Pres.

THE UNITED STATES, [SEAL.]
By F. D. ROOSEVELT,

As Acting Secretary of the Navy.

Attest:

[SEAL.] J. W. WIDDUP.

Signed and sealed in the presence of
GRAHAM EGERTON,

Solicitor.

As to F. D. Roosevelt,

Acting Secretary of the Navy.

33 Ordnance Pamphlet No. 400.

Department of the Navy,

Bureau of Ordnance.

*General Specifications for the Manufacture and Inspection of
Ordnance Material for the United States Navy.*

April, 1917.

*General Specifications for the Manufacture and Inspection of
Ordnance Material for the United States Navy.*

1. Intention.—It is the declared and acknowledged intention and meaning of this specification to provide and secure ordnance material as specified in the contract.

2. Contract.—The contract covering the work to be done will be based upon this specification and the plans to which the contract refers will be attached to it and form a part thereof.

3. Omissions, misdescriptions, and discrepancies.—The omission from this specification, or other papers attached thereto and forming a part thereof, or the misdescription of any details of the work the proper performance of which is necessary fully to carry out the intention hereinbefore expressed, shall not operate to release the contractor from performing such work, but all work shall be fully and properly performed without additional expense to the Government in the same manner as if fully and correctly shown and described by this specification and required in and by the contract accompanying this specification. Should any discrepancy exist between plans and specification, or any part of the specification or plans, or should the language of any part of the specification be ambiguous or doubtful, the Bureau of Ordnance shall decide as to the true intent and meaning thereof.

4. Oral Modifications.—It must be distinctly understood that no oral statement of any person whomsoever shall be allowed in any manner or degree to modify or otherwise affect the terms of this specification or of the contract for this work.

5. Changes.—The Chief of the Bureau of Ordnance reserves the right to make such changes in the specifications or plans as he may deem necessary or advisable in order fully to carry out the intention hereinbefore expressed. Any change in the specification or plans determined upon by the Chief of the Bureau of Ordnance shall be fully described and stipulated to the contractor in writing and shall be agreed to and be performed by the contractor in accordance with the terms of the contract.

6. Plans.—The necessary plans fully and completely to carry out the intention of this specification will be furnished the contractor by the Government or will be furnished by the contractor and approved by the Government, and must be considered as part of this specification and of the contract, in which reference to the plans will be specifically made. The figured dimensions on these plans must not be deviated from to an extent greater than the allowed tolerances. When no tolerances are stated on the drawings, or in the specification, the parts must be finished within the reasonable limits of good workmanship.

7. Whenever, during the manufacture of the guns and other articles, there is any departure from the standard plans approved by the Bureau, arising either from correction of errors or for manufacturing reasons, blue prints or corrected plans will be furnished by the bureau, or by the contractor, according to whether the work is done from Bureau plans or contractors' plans.

No departure from standard plans, either in regard to prescribed dimensions or nature of material, will be allowed without the Bureau's express authority.

8. Inspection.—The Bureau shall have the right to keep at the works where ordnance material is being manufactured agents or inspectors, who shall have free access to all parts of the works and who

shall be permitted to witness all the processes of manufacture, and to examine all the contractor's records with reference to such matters.

36 9. The contractor shall supply the inspector, as a part of his contract, with suitable office room, and with such plain office furniture as may be necessary for the proper transaction of business. The contractor will be expected to provide suitable fire proof storage for the drawings and files of the inspector. The contractor shall furnish meals during working hours to the inspector and his assistants.

10. All information and reports, written, or oral, concerning the material, tests, processes, etc., and all assistance that the inspectors may require from the contractor or his employees, shall be rendered as a part of his contract.

11. A statement of work to be commenced and in progress each day must be furnished to the chief inspector if required by him. The inspector shall keep in touch with the progress of manufacture noting any marked delays. Whenever material is ready for inspection, reports shall be made on approved forms. In addition, written reports indicating all the treatments given the material shall be made when ingots are cast or when forgings are finished.

12. Inspections without notice may be made at any time by the inspectors; but the inspectors will use discretion and not interfere unnecessarily with the progress or control of the work.

13. The contractor shall at all times render such assistance to the inspectors as the latter may require in the prosecution of their duties as they understand them.

37 14. The inspector will decide, in the first instance, as to the results of all official tests. If in doubt he shall refer the matter to the Bureau.

15. The obligation is upon the contractor to satisfy the inspector as to the correctness of all information, records, reports, gauges, methods and tests, and in accordance with the terms of the contract.

16. If the inspector considers that any of the work is not in accordance with the contract he will so inform the contractor at once, and immediately thereafter in writing give his reasons for so doing, both to the Bureau and the contractor. After the oral notification any work done by the contractor on the material in question — be at his own risk.

17. Except as hereinafter provided, all tests measurements, etc., shall be made at the expense of the contractor, under the observation and supervision of the inspectors, and with the contractor's gauges and instruments, except in the cases where such gauges or instruments are provided by the Bureau. The inspector shall have the right to verify all testing or gauging instruments at any time.

18. Identification Marks.—Marks of identification and inspection will be retained or replaced to show on finished forgings or large castings. In addition to the manufacturer's forging identification marks, an identification mark shall be placed on the forging or casting at the time that either is accepted, and subsequently to the test for physical and chemical properties. This mark shall be carried on the forging or casting until completion, transferring from time to time as may be found necessary. The contractor shall also stamp each completed detailed part with its "identification stamp," as called for on the drawings, and each assembled unit or article with its "description method of marking," as called for by the standard method of marking drawings.

19. All machined work must be examined by the agents of the contractor for workmanship and material, and found to be up to the contract standard before it is submitted to the inspector.

20. The contractor must consult the inspector as to the seriousness of any defect which may have developed during manufacture, and call his attention to such defects at the time they are noted. Detail inspection of any part entering into an assembly should not be made until the assembly is completed.

21. Lots of machined work will be submitted with the gauges and instruments used in the contractor's inspection, and if these gauges are not satisfactory the Bureau (at its own expense) may provide and use any others.

22. The inspector may at any time reject finished or unfinished work for defects of material or workmanship and no rejected material shall be embodied in articles to be furnished the bureau, nor shall again be submitted for acceptance, except by consent of the inspector. Material rejected on account of defective workmanship shall be replaced at the contractor's expense.

23. The measuring instruments and gauges used by the contractor must be adequate to the work and the best of their respective kinds. They will be verified by the inspector before being used and at other times as necessary. The measuring instruments must read to at least one-thousandth of an inch when so required by the specifications or drawings for the parts to which they apply.

24. While the maintenance of a standard temperature during measurements is not required, precautions should be taken to avoid large deviations from 70 degrees F. While measuring the work and checking the gauges the temperature of both gauges and work should invariably be the same. The temperature should be uniform throughout all measurements.

25. Material and Workmanship.—The material for all parts shall be as specified on the plans, and of the best quality, and so treated as to be suitable and efficient for the purposes intended. All material must comply with the bureau's specifications. If required

by the inspector, test specimens of standard dimensions must be supplied at the contractor's expense for the purpose of exhibiting the quality of any material being used. No material shall be used which has not been passed by the bureau's inspector as suitable.

26. During the progress of the work all material will be subject to inspection for defects of material or workmanship, and
40 all finished articles will be rigidly inspected for defects of any sort in material, workmanship, fit, or efficiency.

[U. S. Seal.]

RALPH EARLE,

Chief Bureau of Ordnance.

RUSSELL MOTOR CAR COMPANY.

Navy Department,
Bureau of Ordnance,
April, 1917.

Attest:

J. W. WIDDUP.

Ordinance Pamphlet No. 400-C.

Specifications for the Manufacture of Deck Mounts for the United States Navy.

(Supplementary to General Specifications, Ordnance Pamphlet No. 400.)

March, 1917.

Specifications for the Manufacture of Deck Mounts for the United States Navy.

(Supplementary to General Instructions, Ordnance Pamphlet No. 400.)

41 1. Interchangeability.—In order to secure interchangeability of the different parts of the mounts and their appurtenances, the contractor shall, at his own expense, procure all necessary gauges and templets, and such gauges and templets shall be approved by the inspector prior to their use. One complete set of these gauges and templets shall become the property of the Government on the completion of the contract. The contractor shall use all necessary jigs to insure this interchangeability, and it shall be the duty of the inspector to see that these provisions are complied with. Should it be desired to secure interchangeability with mounts manufactured by the Government, the right is reserved to furnish any or all gauges and templets at the discretion of the Government, and when such gauges and templets are furnished they shall be used by the contractor.

2. Assembled units; Slides.—(a) The trunnions on the slides must be accurately turned so that they will fit the approved gauges;

the axis of the trunnions must be in perfect alignment and be at right angles to and intersect the axis of the slide. A gauge similar to that used by the Government should be used by the inspector to test the accuracy of the machining of the trunnions. The finished bore of the slide must be a true cylinder whose axis is at right angles to and intersects the axis of the trunnions.

(b) The gun keyway on the inside surface of the bore of the slide must have its edges parallel to the axis of the bore of the slide.

42 (c) The axis of each recoil cylinder and spring cylinder must be parallel to the axis of the bore of the slide and located with respect to the vertical and horizontal planes passing through the axis of the slide as specified on the drawings.

(d) The bores of the recoil cylinders, the diameters of the pistons, the piston rods, the diameters of the throttling rods, or the rifling of the recoil cylinder, the diameters of the counter recoil plungers, and the holes for the same must be exactly as called for on the drawings, as very slight variation from the specified sizes would considerably change the functioning of the recoil or the counter recoil of the gun.

(e) The recoil and spring cylinders should be carefully inspected to see that all borings and chips, or other foreign material have been removed before the pistons, spring disks, springs, etc., are assembled and the cylinder heads secured in place. The recoil springs should be washed with lye and well covered with vaseline before installing in the spring cylinders.

(f) No recoil springs should be passed by the inspector that do not conform in every respect with the detail drawings of the springs and the bureau's specifications for recoil springs.

(g) The inspector must examine the detail parts of the recoil system and compare them with the drawings to see that the full recoil of the gun can be obtained. The springs and separating disks must not bring up solid when compressed from their initial position an amount equal to the full recoil of the gun.

43 (h) The bearing surfaces to which the sight bracket are attached must be located by gauge exactly parallel to the bore of the slide and at right angles to the axis of the trunnions. The bolt holes for securing sight brackets to slide must be drilled from the sight brackets using them as gauges.

(i) The bores of the air compressor cylinders, the diameters of the pistons, piston packing rings, piston rods, the valves, etc., must be accurately machined and finished so as to fit or function without leakage of air. (Provided such air compressors are to be supplied with the mount.)

(k) Test Pressures.—The space in the recoil cylinders subjected to pressure when the gun recoils must be tested with a water pressure of 3,000 pounds per square inch, and unless tested to 3,000 pounds

per square inch with the pressure side of cylinder, the space in the cylinder forward of the piston must be tested with a pressure of 1,000 pounds per square inch; under these pressures the cylinder must not show any leakage, nor the cylinder head nor stuffing-box bolts or packings show any signs of weakness.

3. Carriage.—(a) The turned bearings of the pivot and the bearing seat for the roller or ball path must be concentric and at right angles to each other. The dimensions of the bearing surfaces should be carefully measured by the inspector to see that they are machine-made to within the tolerances mentioned on the drawings.

44 (b) The bore of the trunnion bearings must be concentric and in perfect alignment with each other and parallel to a horizontal plane passing through the axis of the training rollers or balls.

(c) The surfaces to which the training-gear brackets should be attached must be located by gauge to conform strictly to drawing dimensions.

(d) The surface to which the elevating-gear brackets are attached should be located by gauge to conform strictly to drawing dimensions, from the axis of the trunnion bearing.

(e) The bolt holes in the carriage to secure the elevating and training gear brackets, etc., thereto, should be drilled from these brackets, using them as gauges.

(f) All attached parts, such as elevating and training gear brackets and supports, trunnion-bearing brackets, etc., are to be machined from the approved jigs and gauges.

(g) Trunnion Bearings.—All specially treated or hardened parts of trunnion bearings shall be tested to determine whether the proper degree of hardness as called for on the drawing has been given. All rollers or balls must be accurate as to diameters. The trunnion fulcrum should be assembled so that the cylindrical bearing surface is true with respect to the trunnion axis. The horizontal surfaces of the various parts of the trunnion bearing must be parallel to the horizontal plane passing through the axis of the trunnion.

45 Trunnion bearings should be assembled to suit the assembly marks called for on the drawing.

(h) Carriage Frictionless Bearings.—The upper and lower paths of the roller or ball bearing on which the carriage is trained must be machined and ground so as to obtain accurate bearing surfaces for the rollers or balls. The surface of each path must be true surface. The rollers or balls and their paths must be tested for hardness to determine whether the degree of hardness as called for on the drawing has been given. All rollers or balls must be accurate as to diameters.

4. Stands.—The axes of the pivot bearing and the training circle must be in alignment and at right angles to the machined face of

the base of the stand. The roller or ball bearing seat should be parallel to the machined face of the base of the stand and at right angles to the axis of the pivot bearing. The diameters of the bearing surfaces for the pivot should be carefully measured by the inspector to see that they have been machined to within the tolerance specified on the drawing and that they have not been bored eccentrically.

5. Assembly.—The contractor must assemble, for inspection, the mount complete with all its different fittings as specified in the contract before the inspector shall permit the shipment of any of the parts. With the mount completely assembled the inspector must test the training and elevating gear by training and elevating the
46 gun through the maximum angle permitted by that training circle and the elevating arc, in order to determine whether there is any lost motion or tight places existing in the gearing that need further adjustment or fitting. When thus assembled the mount should be carefully inspected for general finish and appearance, the hand elevating gear and trunnion adjustment should be tried out, and the whole mount inspected to see if all oil holes, oil-hole covers, and oil cups as called for on the drawings have been supplied and that all "assembly marks," "method of marking," and name plates have been shown or attached on the respective parts of the mount as called for on the drawings.

6. General.—The Government reserves the right to require the contractor to assemble each slide, fitted complete with all attachments, disks, pistons, rods, etc., shield plate, if any, and sight, assembled with the gun and breach mechanism of the mark for which the mount is designed, loaded with service charge and projectile, and mounted on its trunnion knife-edge bearings, to determine whether the designed center of gravity of the gun and oscillating parts is vertically below the axis of the trunnions when the gun is level. In making this test permission may be given by the inspector to substitute suitable weights, properly located, to take the place of any of the attachments of the slide that may not have been completed at the time.

7. Final Inspection.—Before final acceptance the Government reserves the right to require that each mount, with its fittings
47 complete, must stand a satisfactory proof test at the Naval Proving Ground. The Government further requires that the contractor shall replace any part or parts of the amount or its appurtenances which shall fail, under service conditions, within one year from date of its installation aboard ship, provided that it can be shown that the material of the part or parts were defective and not in accord with the Government specifications.

8. Shipping.—All parts that are to be painted as called for on the drawings shall be painted by the contractor and allowed to dry before shipment. All finished parts not painted are to be made clean and bright, and well rubbed and covered with vaseline or white lead

and tallow to protect them from rust or injury in transit, and delivered f. o. b. cars, as the bureau may direct.

RALPH EARLE,
Chief of Bureau of Ordnance.

Navy Department, Bureau of Ordnance, March, 1917.

Attest:

[SEAL.] J. W. WIDDUP.

48

Ordnance Pamphlet No. 400-D.

[SEAL.]

Department of the Navy,
Bureau of Ordnance.

Specifications for the Manufacture of Sights for the United States Navy.

(Supplementary to General Specifications, Ordnance Pamphlet No. 400.)

March, 1917.

Washington: Government Printing Office: 1917.

Specifications for the Manufacture of Sights for United States Navy.

(Supplementary to General Specifications, Ordnance Pamphlet No. 400.)

1. Interchangeability.—In order to secure interchangeability of the different parts of the sights and their appurtenances, the contractor shall, at his own expense, procure all necessary gauges and templets, and such gauges and templets shall be approved by the inspector prior to their use. One complete set of these gauges and templets shall become the property of the Government on the completion of the contract. The contractor shall use all necessary
49 jigs to insure this interchangeability, and it shall be the duty of the inspector to see that these provisions are complied with. Should it be desired to secure interchangeability with sights manufactured by the Government the right is reserved to furnish any or all gauges and templets at the discretion of the Government, and when such gauges and templets are furnished they shall be used by the contractor.

2. Workmanship.—All the workmanship on the sights shall be of a character and accuracy required of instruments of precision. All bearing surfaces will be given the same high grade of accurate finish as is used in the manufacture of gauges. There must be no lost

motion whatever existing between the moving parts of the sight, and it must be possible to operate the sight through its complete angles of elevation and azimuth adjustments, etc., without excessive effort, due to the parts being too tightly assembled or due to their surfaces not having the high grade of finish called for.

3. The axis of the pivot about which the sight moves in elevation must be exactly at right angles to a vertical plane passed through the sword bar. The curved inside surfaces of the sword bar and those of the sword-bar bearing in the sight bracket must be concentric with the axis of the pivot about which the sight moves in elevation. The sides of the sword-bar bearing and the sides of the sword bar must be exactly parallel to each other and in a plane at right angles to the pivot about which the sight bar moves in elevation.

50 The upper and lower surfaces of the azimuth head and its bearing must be parallel to each other and perpendicular to the vertical axis of pivot about which the sight is set in azimuth. The center from which these curved surfaces have been laid off must be in alignment with the axis about which the sight is set in azimuth. The surfaces of all the sight brackets that secure to the gun slide and their bolt holes are to be machined from approved jigs.

4. Graduations.—The sight graduations, with their respective markings, must be most carefully spaced, cut and stamped on the various dials and drums, strips, etc., in strict accordance with the drawings of the graduations. After the sight has been assembled as hereinafter stated, the elevation graduations on the sight bar and those on the range dial should be carefully checked with each other to see that they read exactly alike when the sight is set in elevation corresponding to range readings on one or the other of these graduations.

5. Assembly; Shop Inspection.—The contractor must assemble, for inspection, each sight, complete with all fittings as specified in the contract, on a suitable shop mounting, before the inspector shall permit the shipment of any of its parts. When thus assembled the sight must be carefully inspected for general finish and appearance, and it must be operated in elevation and azimuth to test for lost motion or excessive tightness of gears or bearings, in order that any necessary fitting or further adjustment may be made. The
51 telescope holders must fit accurately the approved gauge. The oil holes, oil hole covers, and oil cups, as called for on the drawings, must be supplied; all "assembly marks," the method of marking, and the name plates must be shown on or attached to the various parts of the sight as called for on the drawings.

6. Shop Test.—The sight should also be tested to determine the accuracy of the alignment and parallelism of the telescope holders. This can be done by placing a vertical target on some suitable rigid wall or other surface at least 100 feet in front of the sight and perpendicular to the axes of the line of sight of the telescopes when the sight is level. Describe on this target two parallel vertical lines whose

distance apart equals the distance between the center lines of telescopes and intersect these two lines by a horizontal line or lines representing the horizontal plane or planes passed through the center of the telescopes. To test the parallelism of the telescopes, locate the sight in such relation to the target that the line of sight of both telescopes will intersect the intersections of the horizontal line and the two vertical lines on the target. Move the sight slowly in elevation keeping the eye to one of the telescopes to see that the line of sight follows this vertical line on the target. Then check the other telescope without moving the sight in azimuth to see that its line of sight follows its vertical line on the target. Bring the sight back to the level position with the line of sight bearing on the intersections on the target and move the sight to extreme right and left azimuth, observing the horizontal line of the target through the telescope to see that the movement in azimuth of the sight is exactly at right angles to its movement in elevation.

In order to test the azimuth gear for lost motion, move the sight well to the right and slowly bring it back until the vertical wire in the telescope is exactly on the vertical line of the target, being careful not to reverse the motion of the azimuth gear. When the vertical line in that telescope is just on the vertical line of the target make a note of the deflection reading on the azimuth plate. Then run the sight well over to the left and slowly bring it back (without reversing the motion of the azimuth gear) until the vertical wire in the telescope is again just on the vertical line on the target. Make a note of the reading in deflection on the azimuth plate. If the reading taken when coming from the right is the same as when coming from the left, there will be no lost motion in the azimuth gear. Test for lost motion in elevation in a similar manner; that is, run the sight well above a horizontal line on the target and then bring the sight slowly down until the horizontal wire in the telescope exactly touches the horizontal line on the target. Make a note of the reading in elevation. Then starting from a point well below slowly bring the sight up until the wire in the telescope just touches the horizontal wire on the target, and make a note of the sight reading again. If these two readings do not agree, it will probably be due to a lag in the sight caused by lost motion or binding in the gear.

7. Final Inspection.--Where the contractor is manufacturing at the same time and under the same contract both sights and the mounts to which they are to be attached, the inspector must require the contractor to completely assemble at least one of the sights on one of the completely assembled mounts. When thus assembled the sight can be inspected according to "Instructions on inspecting and testing sights," given in Ordnance Pamphlet No. 346, dated June 29, 1910. Before the final acceptance of the sight the Government reserves the right to require the sight and its fittings complete assembled on the mount for which it has been designed to stand a satisfactory proof test at the Naval Proving Ground. The Government further requires that the contractor shall replace any part or parts of the sight or its fittings which have failed, under service con-

ditions, within one year from date of its installation aboard ship, provided that it can be shown that the material of the part or parts were defective and not in accord with the Government specifications.

8. Shipping.—All parts that are to be painted as called for on the drawings shall be painted by the contractors and allowed to dry before shipment. All finished parts not painted are to be made bright and clean and well rubbed and covered with vaseline or white lead and tallow and carefully packed to protect them from rust or injury in transit and delivered f. o. b. cars, as the bureau may direct.

[U. S. Seal.]

RALPH EARLE,

Chief Bureau Ordnance.

Navy Department, Bureau of Ordnance, March, 1917.

G. E.

RUSSELL MOTOR CAR CO.

Attest:

J. W. WIDDUP.

EXHIBIT B.

| | |
|----------------------------------|-------------|
| Finished parts | \$50,158.35 |
| Semi-finished parts | 11,132.40 |
| Raw Materials | 132,813.28 |
| Office Supplies | 1,209.48 |
| Sub-Contractors' Claims | 78,388.71 |
| Packing, Shipping, etc. | 1,427.00 |
| Equipment and Installation. | 12,195.70 |
| Miscellaneous Expense | 3,007.42 |

\$290,332.34

55 Sheet #1.

Finished Parts on Contract #1498 Claim with 300% Burden Based on Cost of Last Orders.

| Drawing & part. | Name. | Quan. in claim. | Total cost. |
|-----------------|---------------------|-----------------|-------------|
| 28755-2 | Platform R. H. | 1 | 21.96 |
| 38083-1 | Handwheel | 4 | 41.80 |
| 38083-3 | Key | 15 | 10.38 |
| 38842-1 | Housing | 10 | 36.15 |
| 38842-7 | Nut | 103 | 17.61 |
| | | 3 | .33 |
| 48378-4 | Trigger | 33 | 72.01 |
| 48378-7 | Bridge | 28 | 19.04 |
| 48378-8 | Insulation | 32 | 17.41 |
| 48378-10 | Screw | 63 | 33.71 |
| 48378-11 | Hinge Pin | 44 | 27.85 |
| 48378-12 | Nut | 35 | 16.10 |
| | | 25 | 5.10 |

| Drawing & part. | Name. | Quan. in claim. | Total cost. |
|--------------------|---------------------------|--------------------|----------------|
| 48378-13 | Insulation | 48 | 12.82 |
| 48378-16 | Screw | 22 | 9.24 |
| 48378-18 | Screw | 217 | 47.83 |
| | | 283 | 57.79 |
| 49105-2) | | | |
| 49156-3) | Cover | 35 | 73.99 |
| 49105-3 | Bushing | 18 | 17.30 |
| 49105-4) | | | |
| 49156-6) | Bushing | 37 | 52.39 |
| 49106-1 | Platform Bracket | 1 | 11.53 |
| 49106-2 | Supporting Pin | 71 | 437.36 |
| 49107-1 | Train Cir. Cover..... | 1 | 19.83 |
| 49107-2 | Train Cir. Cover..... | 1 | 27.26 |
| 49108-1 | Cover Plate | 266 | 8,735.97 |
| 49110-2 | Screw Bolt | 3,493 | 3,398.69 |
| 56 | | | |
| 49154-1 | Bracket | 1 | 61.52 |
| 49154-2 | Key | 34 | 116.59 |
| 49154-4 | Adj. Nut | 26 | 972.40 |
| 49154-5 | Worm Cover | 33 | 183.45 |
| 49154-6 | Bevel Gear | 40 | 122.80 |
| 49154-7 | Bushing | 18 | 38.00 |
| 49154-8 | Bushing | 16 | 17.01 |
| 49156-1 | Bracket | 5 | 219.99 |
| 49156-2 | Bracket Cover | 56 | 115.02 |
| 49156-5 | Bushing | 14 | 11.38 |
| 49156-7 | Bushing | 18 | 28.57 |
| 49156-8 | Bolt | 31 | 14.04 |
| 49158-4 | Bevel Gear | 8 | 40.30 |
| 49158-7 | Bevel Gear | 12 | 45.67 |
| 49158-8 | Train Worm | 31 | 213.28 |
| 49158-9 | Key | 16 | 45.78 |
| 49158-10 | Key | 54 | 40.61 |
| 49158-11 | Key | 6 | 5.50 |
| 49158-12 | Key | 132 | 155.50 |
| 49159-1 | Recoil Cylinder | 2 | 320.00 |
| 49159-3 | Cyl. Head Fow'd..... | 2 | 100.23 |
| 49159-5 | Counter Recoil Cyl..... | 1 | 13.73 |
| 49159-8 | Collar | 3 | 21.33 |
| 49159-9 | Securing Bolt | 13 | 65.88 |
| 49850-1 | Adjusting Ring | 39 | 3,233.88 |
| 49850-2 | Outer Ball Race..... | 3 | 214.62 |
| 49850-3 | Inner Ball Race..... | 4 | 205.38 |
| 49885-1 | Elevating Worm Shaft..... | 3 | 21.40 |
| 49885-2 | Handwheel Shaft | 70 | 164.23 |
| Total | | | \$20,029.62 |

Sheet #2.

| Drawing & part. | Name. | Quan. in claim. | Total cost. |
|--------------------|-----------------------------|--------------------|----------------|
| 49885-3 | Elev. W. W. & P. Shaft..... | 90 | 804.60 |
| 49885-4 | Vert. Train Shaft..... | 9 | 72.41 |
| 57 | | | |
| 49885-5 | Train Worm Shaft..... | 3 | 32.81 |
| 49885-6 | Screw | 41 | 123.12 |
| 49897-1 | Liner Fow'd | 72 | 1,470.96 |
| 49897-2 | Liner Rear | 44 | 1,006.68 |
| 49897-3 | Trun-ion Bushing | 25 | 106.40 |
| 49897-4 | Rivet | 42 | 10.16 |
| 50052-1 | Upper Lever | 95 | 100.89 |
| 50052-2 | Bracket | 2 | 1.88 |
| 50052-3 | Lower Lever | 66 | 39.86 |
| 50053-2 | Lever S. B..... | 3 | 8.36 |
| 50053-4 | Link | 200 | 242.40 |
| 50053-5 | Lever Support | 5 | 12.95 |
| 50053-7 | Lever | 30 | 12.03 |
| 50053-8 | Plunger | 13 | 3.54 |
| 50053-9 | Pin | 265 | 142.55 |
| 50053-10 | Rivet | 29 | .29 |
| 50053-11 | Nut | 63 | 12.47 |
| 50070-1 | Equal Lever | 30 | 126.57 |
| 50070-2 | Vert. Lever | 89 | 56.60 |
| 50070-5 | Plug | 160 | 87.20 |
| 50070-6 | Sear Lever Rod Buffer..... | 34 | 15.57 |
| 50070-7 | Sear Lever Rod..... | 15 | 26.67 |
| 50070-10 | Pin | 12 | 11.56 |
| 50070-11 | Pin | 44 | .44 |
| 50070-12 | Screw Bolt | 48 | 23.18 |
| 50496-2 | Bushing | 140 | 335.72 |
| 50496-3 | Bushing | 1 | 2.54 |
| 51008-1 | Platform R. H..... | 2 | 45.18 |
| 51010-1 | Slide | 1 | 283.69 |
| 51010-2 | Cyl. Cap. | 8 | 1,652.40 |
| 51010-3 | Dowel Pin | 147 | 19.40 |
| 51010-4 | Dowel Pin | 22 | 4.53 |
| 51010-7 | Bushing | 2 | 1.59 |
| 51010-8 | Set Screw | 31 | 68.76 |
| 51010-9 | Pin | 48 | .82 |
| 58 | | | |
| 51011-1 | Arc Bracket | 3 | 170.77 |
| 51011-2 | Arc | 4 | 271.18 |
| 51011-3 | Stop | 19 | 57.76 |
| 51011-4 | Adj. Strip | 4 | 121.35 |

| Drawing & part. | Name. | Quan. In claim | Total cost. |
|-----------------|---------------------------|----------------|-------------|
| 51011-5 | Adj. Key | 6 | 24.60 |
| 51011-6 | Washer | 17 | 1.00 |
| 51011-7 | Pin | 47 | .80 |
| 51011-8) | | | |
| 51011-9) | Key | 27 | 54.20 |
| 12/Z/1-33 | U. S. Std. Bolt..... | 81 | 47.70 |
| 53230-1 | Battery Box Bracket | 5 | 15.20 |
| 55233-1 | Cyl. Hd. Rear..... | 1 | 36.50 |
| 55233-2 | Stuffing Box Nut..... | 11 | 53.80 |
| 55238-1 | Cyl. Liner | 3 | 145.44 |
| 8/Z/1000-21 | Countersunk Bolt | 628 | 257.48 |
| 8/Z/1000-30 | Countersunk Bolt | 335 | 57.96 |
| 8/Z/1104-20 | Screw | 34 | 14.00 |
| 12/Z/1-2 | U. S. Std. Bolt..... | 56 | 20.66 |
| 12/Z/1-17 | U. S. Std. Bolt..... | 42 | 11.76 |
| 12/Z/1-31 | U. S. Std. Bolt..... | 52 | 25.48 |
| Total | | | 8,354.80 |

Sheet #3.

| | | | |
|-----------|----------------------|-----|--------|
| 12/Z/1-32 | U. S. Std. Bolt..... | 10 | 4.60 |
| 12/Z/1-32 | U. S. Std. Bolt..... | 144 | 77.76 |
| 12/Z/1-43 | U. S. Std. Bolt..... | 61 | 39.04 |
| 12/Z/1-62 | U. S. Std. Bolt..... | 110 | 114.40 |
| 12/Z/1-72 | U. S. Std. Bolt..... | 33 | 72.50 |
| 12/Z/2-1 | Nut Plain | 76 | 10.34 |
| 12/Z/2-2 | Nut Cotter | 11 | 1.82 |
| 12/Z/2-3 | Nut Crown | 39 | 7.96 |
| 12/Z/2-6 | Nut Cotter | 33 | 20.39 |
| 12/Z/2-9 | Nut Plain | 511 | 65.41 |
| 12/Z/2-10 | Cottered Nut | 112 | 65.30 |
| 59 | | 16 | 10.86 |
| 12/Z/1-14 | Cottered Nut | 65 | 58.05 |
| | | 259 | 90.39 |
| 12/Z/2-15 | Crown Nut | 54 | 17.60 |
| 12/Z/2-26 | Cotter Nut | 325 | 132.28 |
| 12/Z/4-92 | Set Screw | 18 | 14.36 |
| | | 82 | 27.88 |
| 12/Z/4-93 | Set Screw | 37 | 11.77 |
| 12/Z/5-20 | Lock Screw | 68 | 23.66 |
| 12/Z/5-30 | Lock Screw | 203 | 45.27 |
| 12/Z/5-34 | Lock Screw | 36 | 4.82 |
| 12/Z/5-80 | Cap Screw | 39 | 39.08 |
| | | 150 | 28.35 |
| 12/Z/5-90 | Cap Screw | 29 | 4.03 |
| | | 500 | 185.00 |
| | | 352 | 78.85 |

| Drawing & part. | Name. | Quan. in claim. | Total cost. |
|--------------------|-------------------|--------------------|----------------|
| 12/Z/5-92 | Cap Screw | 7 | 10.12 |
| 12/Z/6-12 | Cap Screw | 30 | 24.24 |
| 12/Z/6-21 | Cap Screw | 106 | 51.30 |
| 49878-9 | Def. Plate | 59 | 24.13 |
| 49918-3 | Pivot Pin | 42 | 113.99 |
| 50795-3 | Rivet | 45 | 9.32 |
| 8/Z/1000-24 | Ctsk. Bolt | 156 | 47.42 |
| 8/Z/1000-40 | Ctsk. Bolt | 32 | 10.08 |
| 12/Z/2-16 | Crown Nut | 66 | 36.83 |
| 12/Z/4-101 | Set Screw | 65 | 16.64 |
| 12/Z/7-70 | Mach. Screw | 64 | 10.50 |
| 49109-2 | Bushing | 69 | 2,527.75 |
| | | 140 | 5,006.54 |
| 12/Z/2-21 | Nut Plain | 292 | 113.00 |
| | | 35 | 18.69 |
| Total | | | \$9,272.37 |

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Sheet #4.

| | | | |
|----------|--------------------|----------------------------------|----------|
| 38842-10 | Cotter Pin | 500 | 1.79 |
| | | 1,090 | 3.85 |
| 48378-9 | Spring | 303 | 9.47 |
| 49108-3 | Felt Washer | 93 | 1.90 |
| | | 250 | 7.50 |
| 49154-3 | Liner | 214 | 5.05 |
| 49159-10 | Packing | 278 | 83.40 |
| | | 35 | 10.50 |
| 49159-11 | Packing | 275 | 72.54 |
| | | 50 | 13.75 |
| 49159-12 | Packing | 336 | 10.58 |
| 49159-13 | Packing | 24 ⁵ / ₈ # | 22.65 |
| 49159-13 | Packing | 27 # | 24.30 |
| 49850-4 | Balls | 16,150 | 3,385.69 |
| 49850-4 | Balls | 17,200 | 3,601.68 |
| 49850-4 | Balls | 700 | 148.95 |
| 49850-4 | Balls | 2,316 | 484.28 |
| 50070-3 | Spring | 229 | 9.33 |
| 50070-8 | Spring | 53 | 2.55 |
| 50070-8 | Spring | 175 | 8.27 |
| 55234-1 | Outer Spring | 32 | 412.96 |
| 55234-1 | Outer Spring | 23 | 297.16 |
| 55234-2 | Inner Spring | 32 | 412.96 |
| 55234-2 | Inner Spring | 23 | 297.16 |
| 1591-1 | Washer | 74 | 111.89 |
| 1591-1 | Washer | 153 | 231.03 |
| 1591-1 | Washer | 160 | 233.60 |
| 1591-1 | Washer | 67 | 97.62 |

| Drawing & part. | Name. | Quan. in claim. | Total cost. |
|--------------------|--------------|--------------------|----------------|
| 1591-2 | Washer | 343 | 535.08 |
| 1591-2 | Washer | 15 | 23.55 |
| 1591-2 | Washer | 238 | 371.28 |
| 1591-2 | Washer | 232 | 350.32 |
| 1591-2 | Washer | 327 | 509.79 |
| 1591-2 | Washer | 117 | 176.67 |

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| | | | |
|-------------|-----------------|-------|-------|
| 8/Z/1104-14 | Len Washer..... | 125 | 1.19 |
| 8/Z/1104-14 | Len Washer..... | 334 | 1.06 |
| 12/Z/3-1 | Taper Pin..... | 275 | 2.94 |
| 12/Z/3-1 | Taper Pin..... | 10 | .07 |
| 12/Z/3-2 | Taper Pin..... | 1,375 | 16.50 |
| 12/Z/3-2 | Taper Pin..... | 128 | 1.05 |
| 12/Z/3-3 | Taper Pin..... | 7 | .06 |
| 12/Z/3-3 | Taper Pin..... | 1,100 | 14.52 |
| 12/Z/3-4 | Taper Pin..... | 2,500 | 36.25 |
| 12/Z/3-4 | Taper Pin..... | 141 | 1.41 |
| 12/Z/3-5 | Taper Pin..... | 275 | 4.32 |
| 12/Z/3-5 | Taper Pin..... | 15 | .16 |
| 12/Z/3-24 | Taper Pin..... | 275 | 6.60 |
| 12/Z/3-24 | Taper Pin..... | 31 | .51 |
| 12/Z/3-25 | Taper Pin..... | 266 | 6.97 |
| 12/Z/3-34 | Taper Pin..... | 550 | 24.86 |
| 12/Z/3-34 | Taper Pin..... | 60 | 2.15 |
| 12/Z/3-40 | Cotter Pin..... | 1,000 | .43 |
| 12/Z/3-40 | Cotter Pin..... | 587 | .15 |
| 12/Z/3-41 | Cotter Pin..... | 1,000 | .48 |
| 12/Z/3-41 | Cotter Pin..... | 547 | .16 |
| 12/Z/3-52 | Cotter Pin..... | 1,692 | 8.24 |
| 12/Z/3-52 | Cotter Pin..... | 2,621 | 12.63 |
| 12/Z/3-53 | Cotter Pin..... | 1,000 | 5.47 |
| 12/Z/3-53 | Cotter Pin..... | 1,117 | 6.05 |
| 12/Z/3-63 | Cotter Pin..... | 4,000 | 33.00 |
| 12/Z/3-75 | Cotter Pin..... | 1,000 | 1.67 |
| 12/Z/3-75 | Cotter Pin..... | 1,000 | 1.62 |
| 12/Z/3-75 | Cotter Pin..... | 38 | .06 |

Total \$12,159.68

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Sheet #5.

| | | | |
|-------------|---------------------|-------|--------|
| 12/Z/300-32 | Oil Hole Cover..... | 191 | 4.39 |
| | Machine Screws..... | 648 | 7.74 |
| | Machine Screws..... | 144 | 1.83 |
| | Machine Screws..... | 4,515 | 44.20 |
| | Name Plate..... | 328 | 106.27 |
| | Name Plate..... | 1,231 | 448.08 |
| | Name Plate..... | 58 | 16.65 |

| Drawing & part. | Name. | Quan. in claim. | Total cost. |
|-----------------|------------------|-----------------|-------------|
| 8/Z/1104-23 | Len Washer..... | 82 | .35 |
| 12/Z/3-62 | Cotter Pin..... | 720 | 5.40 |
| 12/Z/3-62 | Cotter Pin..... | 500 | 3.72 |
| 12/Z/3-62 | Cotter Pin..... | 441 | 3.23 |
| 12/Z/3-63 | Cotter Pin..... | 2,720 | 22.18 |
| 12/Z/3-63 | Cotter Pin..... | 53 | .44 |
| 12/Z/300-11 | Grease Cups..... | 82 | 10.12 |
| 12/Z/300-26 | Oil Cups..... | 503 | 90.79 |
| 12/Z/300-26 | Oil Cups..... | 82 | 14.79 |
| 49108-2 | Flat Strip..... | 114.8# | 7.46 |
| Total | | | \$787.64 |

Sheet #6.

Recapitulation of Finished & Commercial Parts on Contract #1498 Claim.

| | | |
|---------------------------|-----------|-------------------|
| Sheet #1..... | 20,029.62 | Finished Parts. |
| Sheet #2..... | 8,354.80 | Finished Parts. |
| Sheet #3..... | 9,272.37 | Finished Parts. |
| Sheet #4..... | 12,159.68 | Commercial Parts. |
| Sheet #5..... | 787.64 | Commercial Parts. |
| Total | 50,604.11 | |
| Adjustment of Burden..... | 445.76 | |
| Total | 50,158.35 | |

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Semi-Fin. Parts in Claim 1498.

Based on 300% Cost Now Charged to Gun Mount.

| Drawing & part No. | Name. | Quan. in claim. | Cost, each. | Total cost, inc. labor & burden. |
|--------------------|-------------------|-----------------|-------------|----------------------------------|
| 38083-1 | Handwheel | 70 | 4.64 | 324.80 |
| 49105-3 | Bushing | 100 | .3205 | 32.05 |
| 49109-1 | Stand | 26 | 212.376 | 5,521.78 |
| 49110-2 | Standard Bolt.... | 504 | .301 | 151.70 |
| 49154-4) | | | | |
| 49156-4) | Adjusting Nut.... | 278 | 1.78 | 494.84 |
| 49156-8 | Bolt | 24 | .404 | 9.70 |
| 49158-2 | Elev. Pinion..... | 16 | 3.927 | 62.83 |
| 49158-5 | Bevel Gear..... | 8 | 4.146 | 33.17 |
| 49158-6 | Bevel Gear..... | 30 | 4.15 | 124.50 |
| 49850-3 | Inner Ball Race.. | 24 | 45.89 | 1,101.36 |
| 49850-3 | Inner Ball Race.. | 2 | 114.15 | 228.30 |

| Drawing & part No. | Name. | Quan. in claim. | Cost, each. | Total cos inc. labor & burden |
|--------------------------------|---------------------------------|--------------------|-------------|-------------------------------------|
| 49850-3 | Inner Ball Race.. | 70 | 22.94 | 1,605.80 |
| 49897-1 | Liner Fw'd (Mat. only) | 3 | 15.026 | 45.08 |
| 49897-3 | Trun-ion Bushing. | 8 | 2.761 | 22.09 |
| 50053-3 | Handle | 24 | .766 | 18.38 |
| 50496-3 | Bushing | 19 | 1.685 | 32.01 |
| 8/Z/1000-21 | Bolt | 2,150 | .11 | 236.50 |
| 8/Z/1000-21 | Bolt | 427 | .086 | 36.72 |
| 8/Z/1104-9 | Drain Plug..... | 60 | .198 | 11.88 |
| 12/Z/1-31 | U. S. Std. Bolt.... | 1,174 | .085 | 99.79 |
| 12/Z/1-32 | U. S. Std. Bolt.... | 237 | .238 | 67.07 |
| 12/Z/1-42 | U. S. Std. Bolt.... | 465 | .235 | 109.27 |
| 12/Z/2-14 | Cottered Nut..... | 1,898 | .151 | 286.60 |
| 49875-2 | Grad. Strip..... | 129 | 2.459 | 317.21 |
| 49877-7 | Handwhl. Shaft.. | 23 | .67 | 15.41 |
| 64 | | | | |
| 49878-5 | Drum Disc..... | 106 | .941 | 99.75 |
| 49878-7 | Handwhl. Shaft... | 71 | .56 | 39.76 |
| 49918-3 | Pivot Pin (Mat. only) | 198 | .... | 47.23 |
| Total | | | | 11,175.58 |
| Less Adjustment of Burden..... | | | | 43.18 |
| Total | | | | 11,132.40 |

Inventory of Raw Material.—Continued.

| Draw. & pt. No. | Name of part. | Quan. | Weight. | Price. | Total cost. |
|-----------------|-------------------|-------|---------|-----------|-------------|
| 49110-1 | Train. Circle | 136 | 13,595 | .212 | 2,882.14 |
| 49112-1 | Carriage | 93 | 43,840 | 18.185 C | 7,972.30 |
| | | | 10,127 | .1725 lb. | 1,746.90 |
| | | | 30,518 | .18002 | 5,493.85 |
| | | | 31,005 | .173 | 5,363.87 |
| | | | 22,887 | .213 | 4,874.93 |
| | | | 9,355 | .1824 | 1,706.35 |
| 49154-1 | Train. Gear Brkt. | 5 | 55,085 | .18278 | 10,068.44 |
| 49164-4 | Adj. Nut | 522 | 564 | .1816 | 102.42 |
| | | | 1,820 | .478 | 869.96 |
| 49156-4 | Worm Cover. | 250 | 1,470 | .345 | 507.15 |
| 49154-5 | Bevel Gear Cover | 252 | 792 | .345 | 273.24 |
| 49154-6 | Bushing | 75 | 272 | .478 | 130.01 |
| 49154-7 | Bushing | 116 | 293 | .478 | 140.05 |
| 49156-1 | Bracket | 11 | 657 | .21 | 137.97 |
| 49156-5 | Bushing | 45 | 189 | .478 | 90.34 |
| 49156-6 | Bushing | 64 | 284 | .422 | 119.84 |
| 49156-7 | Bushing | 51 | 90 | .442 | 39.78 |
| 49158-3 | Elevating Worm | 156 | 503 | .478 | 240.43 |
| 49158-5 | Bevel Gear | 852 | 3,312 | .478 | 1,583.14 |
| 49158-6 | Bevel Gear | 431 | 2,624 | .478 | 1,254.27 |
| 49158-8 | Training Worm | 199 | 1,718 | .478 | 821.20 |
| | | | 4,757 | .478 | 2,272.76 |

| | | | | | |
|----------|------------------------|-----|-------|------|-----------|
| 49159-3 | Cyl. Head Forward..... | 255 | 5,116 | 235 | 1,202.26 |
| 49850-2) | Outer Ball Race..... | 228 | 3,580 | 205 | 733.90 |
| 49892-1) | | | 6,687 | 204 | 1,364.15 |
| | | | 2,847 | 202 | 575.09 |
| | | | 3,953 | 338 | 1,336.11 |
| 49850-3) | Inner Ball Race..... | 236 | 4,285 | 204 | 874.14 |
| 49892-2) | | | 711 | 206 | 146.47 |
| | | | 1,916 | 205 | 392.78 |
| | | | 2,113 | 202 | 426.83 |
| | | | 4,359 | 412 | 1,795.91 |
| 49850-5 | Stand Liner..... | 2 | 1,453 | 1112 | 161.57 |
| 49897-1 | Liner Forward..... | 152 | 5,113 | 442 | 2,259.94 |
| 49897-2 | Liner Rear..... | 133 | 4,612 | 442 | 2,038.50 |
| 49897-3 | Bushing..... | 72 | 772 | 478 | 369.02 |
| 50052-1 | Upper Lever..... | 418 | 280 | 456 | 190.61 |
| 50052-2 | Bracket..... | 553 | 218 | 345 | 75.21 |
| | Total..... | | | | 79,715.37 |

Sheet #2.

Contract 1498.

Inventory of Raw Material.

| Draw. & pt. No. | Name of part. | Quan. | Weight. | Price. | Total cost. |
|-----------------|------------------|-------|----------|--------|-------------|
| 50052-3 | Lower Lever..... | 419 | 198 lbs. | 216 | 90.50 |
| 50053-2 | Lever S. B..... | 280 | 348 " | 478 | 166.34 |
| 50053-3 | Handle..... | 503 | 603 " | 478 | 288.23 |
| 50053-4 | Link..... | 396 | 127 " | 206 | 81.58 |

Inventory of Raw Material.—Continued.

| Draw. & pt. No. | Name of part. | Quan. | Weight. | Price. | Total cost. |
|-----------------|-----------------------|-------|----------|----------|-------------|
| 50053-5 | Lever Support..... | 272 | 457 " | .478 lb. | 218.44 |
| 50053-7 | Lever | 363 | 104 " | .126 ea. | 45.74 |
| 50070-1 | Equal. Lever..... | 326 | 918 " | .345 lb. | 316.71 |
| 50070-2 | Verticle Lever..... | 476 | 162 " | .206 ea. | 98.06 |
| 50070-4 | Horizontal Lever..... | 528 | 123 " | .162 " | 85.54 |
| 50070-7 | Sear Lever Rod..... | 333 | 723 " | .345 lb. | 249.44 |
| 50496-1 | Pinion Shaft..... | 101 | 1,675 " | .1816 " | 304.18 |
| | | | 428 " | .173 " | 74.04 |
| 50496-3 | Bushing | 3,360 | " | .213 " | 715.68 |
| 50496-2 | Bushing | 2,518 | " | .212 " | 533.82 |
| 51008-1 | Platform R. H..... | 428 | " | .478 " | 204.58 |
| | | 2 | 19 " | .442 " | 8.40 |
| | | 20 | 1,239 " | .1816 " | 225.00 |
| | | | 828 " | .173 " | 143.24 |
| 51010-1 | Slide | 14 | " | .1851 " | 2.59 |
| | | 106 | " | .18002 " | 2,083.01 |
| | | | 11,571 " | .173 " | 3,075.59 |
| | | | 17,778 " | .213 " | 2,041.82 |
| | | | 9,586 " | .1824 " | 1,832.94 |
| | | | 10,049 " | .1816 " | 4,809.68 |
| | | | 26,485 " | .212 " | 2,371.22 |
| | | | 11,185 " | .1725 " | 355.18 |
| 51010-2 | Cyl. Cap..... | 243 | 2,059 " | .212 " | 1,242.11 |
| | | | 5,859 " | .1816 " | 1,215.99 |
| | | | 6,696 " | | |

| | | |
|---------|------------------------|-----|
| 51011-2 | Arc. | 253 |
| 51011-4 | Adjusting Strip..... | 134 |
| 53230-1 | Battery Box Brkt..... | 173 |
| 55233-1 | Cylinder Hd. Rear..... | 162 |
| 55233-2 | Stuffing Box Nut..... | 138 |
| 48105-1 | Wheel | 528 |
| 49876-1 | Bracket | 226 |
| 49876-2 | Bracket Cover..... | 178 |
| 49877-1 | Drum Large..... | 227 |
| 49877-2 | Drum Cover..... | 220 |
| 49877-6 | Drum Disc..... | 290 |
| 49877-8 | Worm Wheel..... | 410 |
| 49878-1 | Drum Small..... | 226 |

| | | |
|---------|------------------|-----|
| 49878-2 | Drum Cover..... | 463 |
| 49878-3 | Worm Wheel..... | 220 |
| 49878-5 | Clamp Disc..... | 201 |
| 49918-1 | Pivot | 11 |
| 49918-2 | Guide | 65 |
| 50795-2 | Lamp Socket..... | 668 |
| 48105-4 | Pin | 86' |

| | | | |
|----------|----------|--------|----------|
| 739.50 | 183 | 4,041 | 739.50 |
| 3,971.64 | 2473 | 16,060 | 3,971.64 |
| 1,835.95 | 2468 | 7,439 | 1,835.95 |
| 815.72 | 182 | 4,482 | 815.72 |
| 155.60 | 1591 | 978 | 155.60 |
| 754.58 | 1598 | 4,722 | 754.58 |
| 402.55 | 1593 | 2,527 | 402.55 |
| 54.06 | 212 | 255 | 54.06 |
| 41.59 | 1816 | 229 | 41.59 |
| 757.25 | 25 | 3,029 | 757.25 |
| 211.28 | 478 | 442 | 211.28 |
| 567.70 | 35 | 1,622 | 567.70 |
| 2,491.25 | 345 | 7,221 | 2,491.25 |
| 603.06 | 345 | 1,748 | 603.06 |
| 1,068.55 | 355 | 3,010 | 1,068.55 |
| 1,573.11 | 6.93 ea. | 261 | 1,573.11 |
| 662.75 | 345 lb. | 1,921 | 662.75 |
| 348.80 | 345 | 1,011 | 348.80 |
| 536.79 | 478 | 1,123 | 536.79 |
| 1,157.12 | 5.12 ea. | 125 | 1,157.12 |

| | | | |
|--------|-----|-------|--------|
| 773.84 | lb. | 2,243 | 773.84 |
| 183.07 | " | 383 | 183.07 |
| 94.88 | " | 275 | 94.88 |
| 26.77 | " | 56 | 26.77 |
| 143.40 | " | 300 | 143.40 |
| 108.22 | ea. | 190 | 108.22 |
| .87 | lb. | 1 | .87 |

Inventory of Raw Material.—Continued.

| Draw. & pt. No. | Name of part. | Quan. | Weight. | Price. | Total cost. |
|-----------------|-----------------|-------|---------|--------|-------------|
| 50070-11) | | | | | |
| 51010-9) | Pin | 95' | 6½ | .46 | 2.99 |
| 51011-7) | | | | | |
| 50053-8 | Plunger | 104' | 27½ | .45 | 12.38 |
| 51010-3 | Dowel Pin | 20' | 13½ | .39 | 5.27 |
| 50053-10 | Rivet | 74' | 3½ | .78 | 2.73 |
| 48378-10) | Screw | 54' | 10 | .33 | 3.30 |
| 49876-3) | | | | | |
| 50794-3 | Pin | 688' | 47½ | .41 | 19.48 |
| | Total | | | | 43,005.70 |

Sheet #3.

Contract 1498.

Inventory of Raw Material.

| Draw. & pt. No. | Name of part. | Quan. | Weight. | Price. | Total cost. |
|-----------------|------------------|--------|----------|--------|-------------|
| 38842-7 | Nut | 34' | 171 lbs. | .29 | 49.59 |
| 49154-3 | Liner | 1,247' | 165 " | .43 | 70.95 |
| 48378-7 | Bridge | 25½' | 3½ | .765 | 2.68 |
| 49105-2) | Cover | 586' | 540 " | .315 | 170.10 |
| 49156-3) | | | | | |
| 49156-2 | Cover | 267' | 380 " | .315 | 119.70 |
| 48378-8 | Insulation | 35' | 5½ | .71 | 2.01 |
| 48378-13 | Insulation | 77' | 10 | | |

| | | | | | | | |
|-----------|------------------------|----------|-------|---|--------|------|--------|
| 49875-2) | Insulation | 98' | 89 | " | 3.50 | " | 343.00 |
| 49878-9) | Grad. Strip | 124' | 205 | " | .44 | lb. | 90.20 |
| | Deflector Plate | | | | | | |
| 49159-5 | Counter Recoil Plunger | 31' 8" | 778 | " | .164 | " | 127.59 |
| 49159-9 | Securing Bolt | 113' | 2,497 | " | .164 | " | 409.51 |
| 49875-3 | Screw Bolt | 65' 11" | 1,161 | " | .164 | " | 190.40 |
| | | 40' 8" | 63 | " | .0875 | " | 5.51 |
| | | 18' 10" | 25 | " | .0875 | " | 2.19 |
| 49875-4 | Screw Bolt | 43' 6" | 37 | " | .07265 | " | 2.69 |
| | | 39' | 43 | " | .0902 | " | 3.88 |
| 49877-7 | Handwheel Shaft | 37' 5" | 39 | " | .0795 | " | 3.10 |
| | | 1,168' | 2,406 | " | .07265 | " | 174.80 |
| 49878-7 | Handwheel Shaft | 67' | 135 | " | .0617 | " | 8.33 |
| 49918-3 | Pivot Pin | 99' 8" | 240 | " | .07265 | " | 17.44 |
| | | 51' 7" | 175 | " | .192 | " | 33.60 |
| 49878-8) | Shaft Collar | 34' 10" | 115 | " | .0608 | " | 6.99 |
| 49877-4) | | 31' 2" | 153 | " | .192 | " | 29.38 |
| 49878-10) | Worm | 230' 11" | 683 | " | .0508 | " | 34.70 |
| 49877-9) | | | 1,507 | " | .192 | " | 289.34 |
| 49158-4 | Bevel Gear | 85' 9" | 790 | " | .0623 | " | 49.22 |
| 49106-2 | Supporting Pin | 62' 6" | 968 | " | .20 | " | 193.60 |
| 49158-7 | Bevel Gear | 98' 7" | 1,341 | " | .0727 | " | 97.49 |
| | | 33' 8" | 688 | " | .204 | " | 140.35 |
| 49775-6 | Aximuth Rack | 22' 7" | 446 | " | .0737 | " | 32.87 |
| | | 54' 11" | 722 | " | .233 | " | 168.23 |
| 12/Z/1-2 | U. S. Std. Bolt | 159' 4" | 1,546 | " | .0714 | " | 110.38 |
| | | 404' 8" | 560 | " | 8.28 | cwt. | 46.37 |

Inventory of Raw Material.—Continued.

| Draw. & pt. No. | Name of part. | Quan. | Weight. | Price. | Total cost. |
|-----------------|------------------|------------|----------|--------|-------------|
| 12/Z/1-17 | " " | | | | |
| 12/Z/1-31) | " " | 448' | 1,000 " | 8.81 | 88.10 |
| 12/Z/1-32) | " " | 3,307' | 10,987 " | 6.53 | 717.45 |
| " -33) | " " | | | | |
| " -38) | " " | | | | |
| 12/Z/1-43) | U. S. Std. Bolt | | | | |
| 12/Z/1-42) | " " | 1,436' 7" | 6,610 " | 7.35 | 497.73 |
| 12/Z/1-62 | U. S. Std. Bolt | | | | |
| 50795-3 | Rivet | 41' | 315 " | 7.71 | 24.29 |
| 49876-6 | Lock Screw | 78' 7" | 31 " | .202 | 6.26 |
| | | 78' 6" | 30 " | 7.95 | 2.39 |
| 12/Z/5-30) | Hlds. Lock Screw | | | | |
| 50070-12) | Screw Bolt | 190' 5" | 95 " | 5.08 | 4.83 |
| 12/Z/5-34) | Hlds. Lock Screw | | | | |
| 12/Z/5-20 | Lock Screw | | | | |
| 12/Z/4-93) | Set Screw Hlds. | | | | |
| 12/Z/4-92) | " " | | | | |
| 12/Z/5-1 | Lock Screw | | | | |
| 8/Z/1005-4) | Collar Screw | 117' | 24 " | 6.915 | 1.66 |
| 8/Z/1005-11) | Cap Screw | 3,664' | 2,429 " | 7.69 | 186.79 |
| 8/Z/1000-21) | Ctsk. Bolt | | | | |
| 8/Z/1000-23) | " " | 2,044' 10" | 2,098 " | 7.83 | 164.27 |
| 8/Z/1000-24) | " " | | | | |
| 8/Z/1000-30) | " " | | | | |
| 49897-4) | Rivet | | | | |

Contract 1498.

Inventory of Raw Material.

| Draw. & pt. No. | Name of part. | Quan. | Weight. | Price. | Total cost. |
|-----------------|-------------------|-----------|----------|------------|-------------|
| 12/Z/5-92) | Cap Screw | 615' | 651 lbs. | .192 lb. | 124.99 |
| 48105-3) | Screw | | | | |
| 51010-3) | Dowel Pin | | | | |
| 50070-5) | Plug | | | | |
| 51010-5) | Stud Bolt | | | | |
| 51011-5) | Adj. Key | 1,087' 8" | 1,616 " | 7.17 cwt. | 115.87 |
| 8/Z/1000-40) | Osk. Bolt | 311' 5" | 498 " | .192 lb. | 95.62 |
| 8/Z/1000-44) | " | 3' 10" | 8 " | .192 " | 1.54 |
| 12/Z/6-12) | Cap Screw | 155' | 2,013 " | 7.407 cwt. | 149.10 |
| 51011-6) | Washer | | 318 " | 7.40 " | 23.53 |
| 51010-4) | Dowel Pin | | | | |
| 51010-8) | Set Screws | | | | |
| 12/Z/6-21) | Cap Screw | | | | |
| | | 47' 3" | 127 " | .192 lb. | 24.38 |
| | | 350' 6" | 925 " | 6.06 cwt. | 56.06 |
| | | 823' 1" | 4,185 " | .192 lb. | 803.52 |
| | | 1,266' 8" | 4,305 " | 5.24 cwt. | 225.58 |
| | | 336' 7" | 1,130 " | 6.42 " | 72.55 |
| 51011-3) | Stop | | | | |
| 49885-2) | Handwheel Shaft | | | | |
| 49885-4) | Vert. Train Shaft | | | | |
| 8/Z/1104-9) | Drain Plug | 18' | 76 " | 6.42 " | 4.88 |
| 49885-1) | Elev. Worm Shaft | 36' 10" | 221 " | .192 lb. | 42.43 |
| 49885-5) | Train. Worm Shaft | | | | |
| 49876-5) | Bracket Bolt | 197' 6" | 1,505 " | 5.03 cwt. | 75.70 |
| 49885-6) | Screw | 242' 5" | 2,293 " | 5.08 " | 116.48 |
| | | 35' 10" | 335 " | 6.89 " | 23.08 |

| | | | | | | | |
|-------------|-------------------------------|-----------|-------|---|-------|------|--------|
| 49110-2 | Screw Bolt | 866' 10" | 9,184 | " | 4.15 | " | 381.14 |
| 49885-3 | Elev. Worm Wheel & Pin. Shift | 4' 4" | 47 | " | 5.08 | " | 2.39 |
| 12/Z/2-1) | Nut Plain | | | | | | |
| 12/Z/2-2) | Nut Cotter | 466' | 646 | " | 9.035 | " | 58.37 |
| 12/Z/2-3) | Nut Crown | | | | | | |
| 12/Z/2-6) | Nut Cotter | | | | | | |
| 12/Z/2-7) | Crown Nuts | 259' 8" | 579 | " | 8.61 | " | 49.85 |
| 49156-8) | Bolt | 682' 9" | 2,291 | " | 8.62 | " | 197.48 |
| 12/Z/2-9) | Plain Nut | 492' 10" | 1,680 | " | .192 | lb. | 322.56 |
| 12/Z/2-10) | Cotter Nut | | | | | | |
| 50053-11) | Nut | 443' | 2,024 | " | 8.69 | cwt. | 175.89 |
| 12/Z/2-14) | Cotter Nut | | | | | | |
| 12/Z/2-15) | Crown Nut | | | | | | |
| 12/Z/2-16) | Nut Plain | | | | | | |
| 12/Z/2-21) | Nut Plain | 94' 8" | 732 | " | 6.89 | " | 50.43 |
| 12/Z/2-26) | Nut | 440' 8" | 5,162 | " | 8.69 | " | 448.58 |
| 12/Z/4-101) | Set Screw | 65' 7" | 70 | " | 7.15 | " | 5.01 |
| 38083-3 | Key | 412' | 777 | " | 8.28 | " | 64.34 |
| 49158-11) | Key | 106' 5" | 68 | " | .202 | lb. | 13.74 |
| 49158-12) | Key | 172' 5" | 157 | " | 11.72 | cwt. | 18.40 |
| 49158-9 | Key | 33' 9" | | " | | | |
| 49158-10 | Key | 68' 3" | 39 | " | .203 | lb. | 7.92 |
| | | 1,558' 8" | 71 | " | 7.93 | cwt. | 5.63 |
| | | | 1,976 | " | .202 | lb. | 399.15 |
| 51011-8 | Key | 102' 10" | 131 | " | 8.50 | cwt. | 11.14 |
| 49154-2 | Key | 571' 3" | 2,123 | " | .202 | lb. | |

| | | | | | | | |
|-----------|----------------|-----------|-------|---|-------|-----|----------|
| 48378-11) | Hinge Pin | 221' | 181 | " | 6.585 | " | 11.92 |
| 48378-12) | Nut | | | | | | |
| 49875-5) | Rivet | | | | | | |
| 50052-4 | Rod | 1,436' 3" | 2,246 | " | 6.05 | " | 135.88 |
| 49878-6 | Clamp Disc | 40' 5" | 812 | " | .20 | lb. | 162.40 |
| 49877-3 | Clamp Disc | 17' 1" | 1,413 | " | .28 | " | 395.64 |
| 55238-1 | Cylinder Liner | 4' | 93 | " | .4226 | " | 39.30 |
| Total | | | | | | | 5,356.49 |

Sheet #5.

Contract 1498.

Recapitulation of Inventory of Raw Material.

| | |
|----------|------------|
| Sheet #1 | 79,715.37 |
| #2 | 43,005.70 |
| #3 | 4,735.72 |
| #4 | 5,356.49 |
| Total | 132,813.28 |

Claim on Contract #1498.

250—3" A. A. Gun Mounts.

Office Supplies.

| Form No. | Name. | Quan. on hand. | Price. | Total |
|----------|-------------------------------|----------------|--------|--------|
| 2. | Req. on Purch. Dept..... | 9,000 | 2.50 M | 22.50 |
| 3. | Receiving Report | 10,000 | 7.125 | 71.25 |
| 4. | Employment Record | 4,000 | 2.80 | 11.20 |
| 5. | Request for change of rate... | 3,000 | 1.63 | 4.89 |
| 6. | Production card | 70,000 | 1.96 | 137.20 |
| 7. | Expense order | 5,000 | 2.77 | 13.85 |
| 8. | " " office copy.. | 3,000 | 8.333 | 25.00 |
| | | 2,000 | 8.15 | 16.30 |
| 9. | Indirect Mat'l req..... | 55,000 | .9285 | 51.07 |
| 10. | " Labor time slip..... | 48,000 | 1.00 | 48.00 |
| 11. | Day clock card | 4,000 | 2.30 | 9.20 |
| 13. | Record of finished stock..... | 2,000 | 11.54 | 23.08 |
| 14. | " " raw material | 1,000 | 9.60 | 9.60 |
| 15. | Final Pay Ticket..... | 2,000 | 1.50 | 3.00 |
| 17. | Record of employment | 600 | 4.25 | 2.55 |
| 18. | Dept. communication | 18,500 | 1.365 | 25.25 |
| 19. | Shipping Order | 800 | 15.00 | 12.00 |
| 20. | Part record | 200 | 12.20 | 2.44 |
| 21. | Shop order | 4,900 | 3.05 | 14.95 |
| 22. | Req. on store..... | 2,000 | 7.30 | 14.60 |
| 23. | Shortage req. | 6,000 | 4.666 | 28.00 |
| | | 1,000 | 3.53 | 3.53 |
| 24. | Scrap Ticket | 1,000 | 9.50 | 9.50 |
| | | 700 | 5.70 | 3.99 |
| 25. | Repair cards | 5,000 | 4.12 | 20.60 |
| 83 | | | | |
| 28. | Pattern record card..... | 700 | 6.00 | 4.20 |
| 30. | Expense clock card..... | 24,000 | 1.987 | 47.69 |
| 31. | Stock card | 5,000 | 4.43 | 21.15 |
| | | 7,000 | 3.85 | 26.95 |
| 33. | Overtime pass | 20,000 | 1.00 | 20.00 |
| 34. | Payroll | 3,000 | 24.67 | 74.01 |
| 35. | Identification card-emp. | 24,000 | 1.96 | 47.04 |
| 36. | Ret'd Material record..... | 1,000 | 4.95 | 4.95 |
| 38. | Equip. inc. card..... | 1,500 | 7.93 | 11.90 |
| 42. | Scrap record | 700 | 11.00 | 7.70 |
| 43. | Production record misc. | 200 | 3.60 | .72 |
| 44. | Night clock card..... | 4,500 | 3.10 | 13.95 |
| 45. | Piece work production card.. | 2,800 | 2.246 | 62.89 |

| Form No. | Name. | Quan. on hand. | Price. | Total. |
|---------------|--------------------------------|----------------|--------|------------|
| 49. | Clock card, 1st shift plant #2 | 3,000 | 4.57 | 13.71 |
| 50. | Clock card 2nd shift women. | 5,000 | 4.57 | 22.85 |
| 52. | " " " " men, 10,- | | | |
| | 000 | 5,000 | 4.57 | 22.85) |
| | | 5,000 | 4.28 | 21.40) |
| 53. | Absentee report | 2,950 | 4.283 | 12.63 |
| 54. | Employment pass | 4,800 | 2.266 | 10.88 |
| 56. | Claim on Trans. Co. | 100 | 1.05 C | 1.05 |
| 57. | Original req. on bond. | 1,800 | 4.30 M | 7.74 |
| 58. | Shortage req. on bond. | 9,400 | 3.875 | 36.43 |
| 59. | Employees transfer slip. | 1,400 | 2.175 | 3.05 |
| 60. | Application blank | 300 | 4.20 | 1.26 |
| 61. | Sales shipping order. | 500 | 16.50 | 8.25 |
| 63. | Final Pay voucher. | 4,400 | 3.00 | 13.20 |
| 65. | Purchase order | 700 | 17.80 | 12.46 |
| 66. | " " copy | 300 | 7.375 | 2.21 |
| 72. | Permanent pass | 500 | .50 C | 2.50 |
| 73. | Office pass | 2,000 | 3.50 M | 7.00 |
| 74. | Parcel pass | 21,600 | 2.97 | 64.15 |
| Forward | | | | \$1,191.32 |

84 Sheet #1 A.

Inventory of Stationery.

| Form No. | Name. | Quan. on hand. | Price. | Total. |
|------------------------|--------------------------------|----------------|--------|------------|
| Forward | | | | \$1,191.32 |
| 75. | Visitor's pass | 1,000 | 4.50 M | 4.50 |
| 79. | Tags for scrap. | 2,800 | 3.25 | 9.10 |
| 80. | Lot identification card | 500 | 1.70 | .85 |
| 82. | Receipt for tools. | 500 | 3.00 | 1.50 |
| 83. | Tag—hold for approval (N) . | 100 | .70 C | .70 |
| 84. | " material rework (N) . | 500 | .70 C | 3.50 |
| 85. | Change of address report. | 1,000 | 1.50 M | 1.50 |
| 86. | Naval Insp. communication | | | |
| | blk. | 300 | 2.25 | .68 |
| 91. | Accident report | 500 | 7.25 | 3.63 |
| 92. | Lot identification card. | 1,800 | 4.00 | 7.20 |
| Total | | | | \$1,224.48 |
| Less Scrap Value. | | | | 15.00 |
| Amount of Claim | | | | \$1,209.48 |

Sheet #2.

Committments on Contract #1498.

250—3" A. A. Gun Mounts.

Sub-contractors' Claims.

| | | |
|----|---------------------------------|-----------|
| | Atlas Crucible Steel Co..... | \$108.06 |
| 85 | Wallace Barnes Co..... | 50.04 |
| | Canada Forge Co..... | 3,008.84 |
| | Canada Fdrs. & Forgings..... | 1,106.53 |
| | Chase Metal Works..... | 1,480.21 |
| | Cleveland Knife & Forge..... | 2,778.15 |
| | Cochrane Brass Fdy..... | 4,533.34 |
| | Jas. Graham & Co..... | 502.61 |
| | Hammond Steel Co..... | 2,841.77 |
| | National Tool Co..... | 54.10 |
| | Otis Steel Co..... | 819.90 |
| | Peerless Drawn Steel Co..... | 1,870.55 |
| | Railway Steel Spring Co..... | 23,422.70 |
| | Camden Forge Co..... | 3,624.31 |
| | Superior Steel Castings Co..... | 32,187.60 |

Total Claims..... \$78,388.71

Sheet #3.

Claim on Contract #1498.

250—3" A. A. Gun Mounts.

Statement of Packing, Shipping, etc.

| | |
|---|------------|
| Cost to Pack & load Raw, & semi-finished materials.... | \$1,286.50 |
| Cost to Pack tools & fixtures for shipment to Navy Dept. | |
| Contract #1498 | 126.51 |
| (Additional charge later when these are shipped.) | |
| Freight & cartage on steel returned from Canada Fdrs. & Forgings, Ltd., Welland, Ont..... | 13.93 |
| Total claim..... | \$1,427.00 |

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Sheet #4.

Claim on Contract #1498.

250—3" A. A. Gun Mounts.

Items of Equipment & Installation.

| | |
|---|------------|
| Rearrangement & alterations of plant..... | \$4,346.82 |
| Installation of Machinery..... | 2,800.73 |
| Installation of Electric Craneway..... | 2,044.16 |
| Chipping shed, erected for contract #1498. | \$539.41 |
| Less salvage value..... | 58.30 |
| | <hr/> |
| | 481.11 |
| % used on Contract 949—50%..... | 240.55 |
| | <hr/> |
| Value not recovered due to cancella- tion #1498 | 240.56 |
| Annealing furnace constructed for #1498.. | 860.61 |
| Less salvage value..... | 117.09 |
| | <hr/> |
| | 743.52 |
| % used on contract 949—50%..... | 371.76 |
| | <hr/> |
| Value not recovered due to cancella- tion #1498 | 371.76 |
| Addition to Hardening Dept. for #1498... | 594.26 |
| Salvage | 98.32 |
| | <hr/> |
| | 495.94 |
| % used on contract 949—50%..... | 247.97 |
| | <hr/> |
| 87 Value not recovered due to cancella- tion #1498 | 247.97 |
| Cost of moving shed for storage of material for contract #1498..... | 378.94 |
| Restaurant & restaurant equipt.: | |
| Total cost | 6,617.18 |
| Fair value | 1,575.02 |
| | <hr/> |
| Amortization | 5,042.16 |
| Applicable to Army contract, 50% | 2,521.08 |
| | <hr/> |
| Applicable to Navy contracts, 50% | 2,521.08 |
| 30% used on #949..... | 756.32 |
| | <hr/> |
| Chargeable to #1498..... | 1,764.76 |
| Contract #949 charged with use of restaurant for Oct., Nov. & Dec., 120 mounts completed during this time. | 12,195.70 |

Sheet #5.

Claim on Contract #1498.

250—3" A. A. Gun Mounts.

Statement of Miscellaneous Expense.

| | |
|---|---------|
| Premium in Bond | \$1,490 |
| Insurance—equipment & supplies valued at \$107,159.46 for 1 year, Dec. 1st, 1918, to Nov. 30th, 1919..... | \$88.40 |

88

| | |
|---|--------|
| Insurance—material valued at \$220,199.04 for 10 months, Dec. 1st, 1918 to Sept. 30th, 1919 | 151.38 |
|---|--------|

| | |
|---|-----|
| Travelling Expense | 239 |
| Telephone & Telegrams—actual amount ap- plying #1498 | 304 |
| Police & watchman services—June 15/19— Dec. 31/19..... | 55 |
| | 910 |

| | |
|-------------------|---------|
| Total claim | \$3,007 |
|-------------------|---------|

December 31st, 1919.

EXHIBIT C.

Summary.

Supplies, tools, jigs and fixtures delivered to the United States as follows:

| | |
|---|------------|
| March 26th, 1920, Car No. L. V. 62888..... | \$40,134.5 |
| March 31st, 1920, Car No. D. L. & W. 33913..... | 4,472.5 |
| April 1st, 1920, Car No. A. T. & S. F. 44405..... | 8,101.5 |
| Total..... | \$52,709.5 |

Contract 1498.

Inventory of Supplies.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|----------------------------------|---------------|-------------|--------------|
| 3 | 287 | 1/2" Sq. Tool Bits | ..... | 150 @ .84 | 126.00 |
| " | 77 | 5/8" " " ) | ..... | 137 @ .838 | 114.81 |
| " | 41 | 3/4" " ") | 190 Lbs. | 1.41 | 108.57 |
| 4 | 2 | #3 Vulcan Clamps | ..... | 24 @ 2.614 | 62.74 |
| " | 2 | " | ..... | 17 @ 2.171 | 36.91 |
| " | 2 | " | ..... | 2.63 | 5.26 |
| " | 2 | " | ..... | 3.31 | 6.62 |
| " | 2 | " | ..... | 4.20 | 8.40 |
| " | 5 | " | ..... | 5.25 | 26.25 |
| 5 | 16 | " | 150 Lbs. | 12 @ 4.90 | 58.80 |
| | | " | 335 " | 4 @ 5.21 | 20.84 |
| 6 | 1 | 7/8 x 12 Bronze Bush (3 1/4 # ) | ..... | .43 lb. | 1.40 |
| 90 | 1 | " | ..... | .43 " | 1.29 |
| " | 8 | 1 1/4 x 12 | ..... | .52 " | 21.71 |
| " | 5 | 1 1/2 x 12 | ..... | .52 " | 21.84 |
| " | 1 | 3 x 2 | ..... | .45 " | 2.36 |
| " | 1 | 4 3/4 x 5 3/4 | ..... | .46 " | 13.46 |
| " | 1 | 1 x 2 x 12 | ..... | .43 " | 4.73 |
| " | 6 | 1 x 2 1/4 x 12 | ..... | .43 " | 33.54 |
| " | 3 | 1 x 2 1/2 x 12 | ..... | .55 " | 16.09 |
| " | 11 | 1 x 3 x 12 | 550 Lbs. | .564 " | 155.10 |

Inventory of Supplies.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|------------------------|---------------|-------------|--------------|
| 7 | 1 | 1½ x 4½ x 12 " | (50 #) | .52 | 26.00 |
| " | 1 | 3 x 5¼ x 12 " | (53½ #) | .52 | 27.82 |
| " | 1 | 4½ x 3 x 8 " | (22 #) | .52 | 11.44 |
| " | 1 | 6 x 7 x 12 " | (42½ #) | .52 | 22.10 |
| " | 1 | T 2050 C | (11½ #) | .40 | 4.60 |
| " | 9 | T 4079 | (52½ #) | .40 | 21.00 |
| " | 6 | T 4141 C | (13 #) | .40 | 5.20 |
| " | 6 | T 4141 D | (8 #) | .40 | 3.20 |
| " | 2 | Cast Brass Nuts | (9½ #) | .40 | 3.80 |
| 91 | | | 320 Lbs. | | |
| " | 1 | 5 x 6¼ x 9 Bronze Bush | (31½ #) | .52 | 16.38 |
| 8 | 3 | #6 Thread Chaser | | .90 | 2.70 |
| " | 1 | #7 " | | .90 | .90 |
| " | 3 | #8 " | | .90 | 2.70 |
| " | 3 | #9 " | | .81 | 2.43 |
| " | 3 | #10 " | | .83 | 2.49 |
| " | 2 | #11 " | | .81 | 1.62 |
| " | 3 | #12 " | | .81 | 2.43 |
| " | 3 | #13 " | | .81 | 2.43 |
| " | 3 | #14 " | | .81 | 2.43 |
| " | 3 | #16 " | | .81 | 2.43 |
| " | 3 | #18 " | | .81 | 2.43 |
| " | 3 | #20 " | | .81 | 2.43 |
| " | 2 set | Harness 1¼" Chaser | | .81 | 2.43 |
| " | 4 | #6 Thread Cutters | | 7.58 set | 15.16 |

| | | | | | | | |
|-------------|---|-----|---|---|---|-----|----------|
| " | 6 | #7 | " | " | " | .46 | 2.76 |
| " | 6 | #8 | " | " | " | .45 | 2.70 |
| " | 6 | #9 | " | " | " | .45 | 2.70 |
| 92 | | | | | | | |
| " | 6 | #10 | " | " | " | .46 | 2.76 |
| " | 6 | #11 | " | " | " | .45 | 2.70 |
| " | 6 | #12 | " | " | " | .45 | 2.70 |
| " | 6 | #13 | " | " | " | .46 | 2.76 |
| " | 6 | #14 | " | " | " | .45 | 2.70 |
| " | 6 | #16 | " | " | " | .45 | 2.70 |
| " | 6 | #18 | " | " | " | .45 | 2.70 |
| " | 6 | #20 | " | " | " | .46 | 2.76 |
| Total | | | | | | | 1,063.48 |

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Sheet #2.

Contract 1498.

Inventory of Supplies.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|-------------------------------|---------------|-------------|--------------|
| 8 | 3 | 80 Deg. Angle Cutters H. S. | ..... | 8.20 | 24.60 |
| " | 1 | " " " " | ..... | 8.20 | 8.20 |
| " | 1 | " " " " | ..... | 6.70 | 6.70 |
| " | 1 | " " " " | ..... | 6.70 | 6.70 |
| " | 1 | 7 P. 26 to 34 Gear Cutter | ..... | 4.72 | 4.72 |
| " | 1 | 8 P. 14 to 16 " | ..... | 4.50 | 4.50 |
| " | 1 | 4 D. P. 208 to 12 Gear Cutter | ..... | 20.30 | 20.30 |
| " | 1 | 10 P. 26 to 34 " | ..... | 9.50 | 9.50 |

Inventory of Supplies.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|--------------------------------|---------------|-------------|--------------|
| " | 1 | 9 P. 155 to 134 " " | ..... | 3.19 | 3.19 |
| " | 2 | 8 x 1½ x 1¼ Sd. Mill Cutter | ..... | 37.56 | 75.12 |
| " | 3 | 5 x ½ x 1 " " | ..... | 17.91 | 53.73 |
| " | 6 | #29 Key Cutter | ..... | 2.91 | 17.46 |
| " | 1 | #4 D. P. 12-18 Stocking Cutter | ..... | 27.19 | 27.19 |
| " | 4 | 60 Deg. 4½ x 1¼ Gear Cutter | ..... | 27.35 | 109.40 |
| " | 4 | 60 " 3½ x 1¼ " " | ..... | 9.50 | 38.00 |
| " | 2 | #7 10 P. " " | ..... | 9.68 | 19.36 |
| " | 3 | 2 x ⅛ x ⅞ Radius " " | ..... | 2.93 | 8.79 |
| " | 2 | 2 x 5/32 x ⅞ " " | ..... | 3.60 | 7.20 |
| " | 2 | S. S. Taper Collets | ..... | 2.75 | 5.50 |
| 94 | | | | | |
| " | 4 | #N " " | ..... | 2.75 | 11.00 |
| " | 2 | #A " " | ..... | 2.75 | 5.50 |
| " | 4 | #KK " " | ..... | 4.50 | 18.00 |
| " | 1 | #2 Morse Taper Collets Blanks | ..... | 1.60 | 1.60 |
| " | 4 | #4 " " | ..... | 2.29 | 9.16 |
| " | 1 | #1 " " | ..... | 1.20 | 1.20 |
| " | 6 | #5 " " | ..... | 2.83 | 16.98 |
| " | 1 | ⅝ R. H. End Mills T. S. | ..... | 4.65 | 4.65 |
| " | 9 | 3/16 Spiral End Mills T. S. | ..... | 3.61 | 32.49 |
| " | 30 | 3/16 " " S. S. | ..... | .85 | 25.50 |
| " | 29 | 3/16 #5 " " | ..... | .85 | 24.65 |
| " | 4 | ¼" T. S. " " | ..... | 2.35 | 9.40 |
| " | 44 | ⅛" Two Lipped End Mills | ..... | 2.35 | 103.40 |
| " | 1 | ⅛" T. S. End Mills | ..... | 1.00 | 1.00 |

| | | | | | |
|-------|---|---------------------------|----------|-------|----------|
| 46 | " | 3/16 Two Lipped End Mills | ..... | 2.35 | 108.10 |
| 19 | " | " | ..... | 2.05 | 16.40 |
| | | 3/8 T. S. | ..... | 1.10 | 12.10 |
| 48 | " | " | ..... | 2.40 | 115.20 |
| 95 | | 3/8 T. S. | ..... |  |  |
| 3 | " | 11/16 T. S. | ..... | 5.28 | 15.84 |
| 7 | " | 3/4 T. S. | ..... | 5.45 | 38.15 |
| 8 | " | 3/4 T. S. | ..... | 5.45 | 43.60 |
| 15 | " | 1" T. S. | ..... | 6.75 | 60.75 |
|  |  | " | ..... | 8.48 | 42.40 |
|  |  | " | ..... | 6.80 | 6.80 |
| 6 | " | 1-5/16 R. H. | ..... | 5.36 | 32.16 |
| 2 | " | 1 1/4" T. S. Spiral | ..... | 2.35 | 4.70 |
| 3 | " | 4 x 2 x 1 1/2 | ..... | 40.50 | 121.50 |
| 5 | " | 3 x 1 3/4 x 1 1/4 | ..... | 22.40 | 112.00 |
| 5 | " | 3 x 2 1/4 x 1 | ..... | 26.86 | 134.30 |
| 3 | " | 1/4-20 Little Giant Dies | 280 Lbs. | 1.00 | 3.00 |
| 3 | " | 3/8-16 " | ..... | 1.25 | 3.75 |
| 2 | " | 1/2-13 " | ..... | 1.50 | 3.00 |
| 2 | " | 5/8-11 " | ..... | 1.75 | 3.50 |
| 2 | " | 3/4-10 " | ..... | 2.00 | 4.00 |
| 2 | " | 5/16-24 Button | ..... | .85 | 1.70 |
| 1 | " | 1/2-20 " | ..... | .85 | .85 |
| 96 | | | | | |
| 24 | " | 3/8-16 " | ..... | .30 | 7.20 |
| 23 | " | 3/4-10 " | ..... | 1.31 | 30.13 |
| 22 | " | #2-56 " | ..... | .64 | 14.08 |
| Total |  |  | ..... |  | 1,677.40 |

Sheet #3.

Contract 1498.

Inventory of Supplies.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|--------------------|---------------|-------------|--------------|
| 9 | 6 | 7/8-9 Button Dies | ..... | 1.72 | 10.32 |
| " | 1 | 15/16-24 " | ..... | 4.30 | 4.30 |
| " | 6 | 1/4-20 Bottom Taps | ..... | .212 | 1.27 |
| " | 14 | 3/16-32 " | ..... | .12 | 1.68 |
| " | 32 | 5/16-18 " | ..... | .238 | 7.62 |
| " | 5 | 3/8-16 " | ..... | .26 | 1.30 |
| 97 | | | | | |
| " | 44 | 1/2-13 " | ..... | .33 | 7.92 |
| " | 36 | 1/2-20 " | ..... | .333 | 6.66 |
| " | 62 | 5/8-11 " | ..... | .336 | 12.10 |
| " | 40 | 3/4-10 " | ..... | .426 | 20.45 |
| " | 36 | 1-8 " | ..... | .422 | 5.91 |
| " | 35 | 1 1/4-7 " | ..... | .576 | 20.74 |
| " | 23 | 1/8-44 Plug | ..... | .573 | 2.29 |
| " | 28 | 5/16-18 " | ..... | .956 | 34.42 |
| " | 5 | 3/8-16 " | ..... | 1.646 | 57.61 |
| " | 42 | 1/2-13 " | ..... | .26 | 5.98 |
| " | 36 | 1 1/2-20 " | ..... | .24 | 6.72 |
| " |  |  | ..... | .26 | 1.30 |
| " |  |  | ..... | .333 | 7.99 |
| " |  |  | ..... | .33 | 5.94 |
| " |  |  | ..... | .33 | 5.94 |

| | | | | | | | | | |
|----|-----|---------------------------------------|---|---|---------------------|-------|-------|------|--------|
| " | 29 | 12" Rd. | " | " | " | 370 # | 25.73 | " | 170.88 |
| " | 12 | 12" Sq. | " | " | " | 370 # | } | 7.10 | 695.80 |
| " | 71 | 14" Mill | " | " | " | 370 # | | | |
| " | 54 | 14" Rd. | " | " | " | 370 # | | | |
| 13 | 324 | 10" Hand Hack Saw Blades. | " | " | " | 350 # | | | |
| " | 394 | 10" Power | " | " | " | 360 # | 13 | @ | 7.15 |
| " | 747 | 12" " | " | " | " | 370 # | 7 | @ | 7.16 |
| " | 960 | 14" " | " | " | " | 370 # | } | 7.10 | 809.40 |
| 14 | 20 | 14 x 1 1/4 x 5 Emery Wheel 60-4-K-84. | " | " | " | 370 # | | | |
| 15 | 20 | " | " | " | " | 370 # | | | |
| 16 | 20 | " | " | " | " | 370 # | | | |
| 17 | 20 | " | " | " | " | 370 # | 2 | @ | 7.16 |
| 18 | 18 | " | " | " | " | 370 # | 19 | @ | 7.19 |
| 19 | 20 | " | " | " | 60-4-K-84-L. | 370 # | } | 7.10 | 13.10 |
| 20 | 19 | " | " | " | " | 370 # | | | |
| 21 | 21 | " | " | " | " | 370 # | | | |
| 22 | 20 | " | " | " | 40-4-K-84. | 370 # | | | |
| 23 | 14 | " | " | " | " | 224 # | } | 7.10 | 809.40 |
| 24 | 20 | " | " | " | " | 370 # | | | |
| 25 | 20 | " | " | " | " | 370 # | | | |
| 26 | 20 | " | " | " | " | 370 # | | | |
| 27 | 20 | " | " | " | " | 370 # | } | 7.10 | 13.10 |
| 28 | 1 | 18 x 2 x 9 | " | " | Emery Wheel 24-C-L. | 370 # | | | |

Inventory of Supplies.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|---------------------|---------------|-------------|--------------|
| 102 | | | | | |
| " | 1 | 18 x 2 x 9 | " | | |
| " | 1 | 18 x 2 x 5 | " | | 13.10 |
| " | 2 | 18 x 2 x 5 | " | | 13.80 |
| " | 2 | 16 x 2 x 1 1/2 | " | | 13.00 |
| " | 3 | 14 x 1 1/4 x 5 | " | | 9.28 |
| " | 1 | 12 x 1 1/2 x 1 1/4 | " | | 7.10 |
| " | 2 | " | " | | 6.55 |
| " | 2 | 8 x 3/4 x 2 | " | | 5.24 |
| " | 2 | 8 x 2 x 3/4 | " | | 2.04 |
| " | 3 | 10 x 1/2 x 3 | " | | 3.44 |
| " | 7 | 7 x 1/2 x 1 1/4 | " | | 1.96 |
| " | | | | 3 @ | 1.18 |
| " | 5 | " | " | 4 @ | 1.207 |
| " | 1 | 6 1/2 x 1/2 x 1 1/4 | " | | 1.18 |
| 29 | 46 | 10 x 1/2 x 3 | " | | 1.03 |
| | | | 445# | | 50.00 |
| | | | 155# | | 7.86 |
| | | | | 25 @ | 1.966 |
| | | | | 4 @ | 1.96 |
| | | | | 3 @ | 1.96 |
| | | | | 14 @ | 2.12 |
| 103 | | | | | 29.68 |
| 30 | 6 | 14 x 1 1/4 x 5 | " | | 7.29 |
| " | 3 | " | " | | 6.01 |
| " | 3 | " | " | | 7.10 |
| 31 | 39 | 12 x 5/16 x 2 1/4 | " | | 7.10 |
| | | | 195# | | 2.45 |
| | | | 165# | | 2.40 |
| | | | | 23 @ | 2.45 |
| | | | | 12 @ | 2.40 |
| | | | | 4 @ | 2.40 |
| | | | | | 28.80 |
| | | | | | 56.35 |
| | | | | | 21.30 |
| | | | | | 21.30 |
| | | | | | 18.03 |
| | | | | | 21.87 |

| | | | |
|-------|------|------|-----------------|
| ..... | 2 @ | 7.22 | 14.44 |
| ..... | 15 @ | 7.16 | 107.40 |
| ..... | 6 @ | 7.10 | 42.60 |
| ..... | 3 @ | 7.17 | 21.51 |
| 175# | | 1.18 | 105.02 |
| ..... |  |  | <u>3,145.08</u> |

| | | | | | | |
|----|----|-----------------|---|---|-------|-------|
| 33 | 89 | 7 x 1/2 x 1 1/4 | " | " | 303-v | |
|----|----|-----------------|---|---|-------|-------|

Total

104

Sheet #5.

Contract 1498.

Inventory Supplies.

| Case No. | Quantity. | Article. | Emercy Wheel (Disc) | 60J | Gross weight. | Price each. | Total price. |
|----------|-----------|---------------------|---------------------|-----------|---------------|-------------|--------------|
| 34 | 5 | 6 x 7/16 x 1 1/4 | " | 50J ... | ..... | 1.00 | 5.00 |
| " | 19 | 6 x 11/16 x 1 1/4 | " | 46J ... | ..... | 1.16 | 22.04 |
| " | 12 | 4 x 1/2 x 1 1/2 | " | 60L ... | ..... | .56 | 6.72 |
| " | 6 | 6 x 1 1/2 x 2 | " | 36U ... | ..... | 1.34 | 8.04 |
| " | 2 | 7 x 1/2 x 1 1/4 | " | 40L ... | ..... | 1.64 | 3.28 |
| " | 1 | 5 x 1 x 1 | " (Rim) | 50-2 ... | ..... | 1.325 | 1.33 |
| " | 3 | 4 x 3/8 x 1/4 | " | 46M ... | ..... | .95 | 2.85 |
| " | 7 | 2 1/2 x 3/8 x 3/8 | " | 50J ... | ..... | .45 | 3.15 |
| " | 13 | 3 1/4 x 1 1/2 x 1/2 | " (Cup) | 50-2 ... | ..... | 1.03 | 13.39 |
| " | 2 | 2 1/2 x 3/8 x 1/4 | " | 50J ... | ..... | .50 | 1.00 |
| " | 6 | 3 1/4 x 1 1/4 x 1/2 | " (Cup) | 60A-3 | ..... | .92 | 5.52 |
| " | 3 | 7 x 1/16 x 1 1/4 | " (Elastic) | " | ..... | 1.25 | 3.75 |
| " | 3 | 7 x 1/16 x 1 1/4 | " | 60A-2 1/2 | ..... | 1.15 | 3.45 |

Contract 1498.

Inventory of Supplies.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|---------------|---------------|-------------|--------------|
| 36 | 12 | Carbon Drills | ..... | .07 | .84 |
| " | 12 | " | ..... | .07 | .84 |
| " | 11 | " | ..... | .065 | .72 |
| " | 12 | " | ..... | .065 | .78 |
| " | 34 | " | ..... | .09 | 3.06 |
| " | 12 | " | ..... | .06 | .72 |
| " | 12 | " | ..... | .06 | .72 |
| " | 36 | " | ..... | .06 | 2.16 |
| " | 12 | " | ..... | .12 | 1.44 |
| " | 12 | " | ..... | .12 | 1.44 |
| " | 11 | " | ..... | .125 | 1.38 |
| 109 | | | | | |
| " | 12 | " | ..... | .125 | 1.50 |
| " | 12 | " | ..... | .14 | 1.68 |
| " | 12 | " | ..... | .13 | 1.56 |
| " | 12 | " | ..... | .14 | 1.68 |
| " | 12 | " | ..... | .14 | 1.68 |
| " | 12 | " | ..... | .15 | 1.80 |
| " | 11 | " | ..... | .15 | 1.65 |
| " | 10 | " | ..... | .155 | 1.55 |
| " | 10 | " | ..... | .16 | 1.60 |
| " | 10 | " | ..... | .17 | 1.70 |
| " | 8 | " | ..... | .19 | 1.52 |

[illegible]

Inventory of Supplies.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|-------------|-----------|----------|---------------|-------------|--------------|
| " | 12 | 29/64 | ..... | .54 | 6.48 |
| " | 12 | 31/64 | ..... | .455 | 5.46 |
| " | 3 | 13/16 | ..... | 1.42 | 4.26 |
| " | 1 | 55/64 | ..... | 1.23 | 1.23 |
| Total | | | | | 157.24 |

Sheet # 7.

Contract 1498.

Inventory of Supplies.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|----------------------------|---------------|-------------|--------------|
| 36 | 2 | 19/64 T. S. Carbon Drills. | ..... | .37 | .74 |
| " | 6 | 33/64 " " | ..... | .94 | 5.64 |
| 112 | | | | | |
| " | 6 | 9/16 " " | ..... | .673 | 4.04 |
| " | 6 | 37/64 " " | ..... | .73 | 4.38 |
| " | 6 | 19/64 " " | ..... | .713 | 4.28 |
| " | 1 | 39/64 " " | ..... | .79 | .79 |
| " | 6 | 5/8 " " | ..... | .78 | 4.68 |
| " | 6 | 21/32 " " | ..... | .813 | 4.88 |
| " | 6 | 43/64 " " | ..... | .89 | 5.34 |

| | | | | | | | | | |
|---|----|---------------------------------|---|---|---|----|---|-------|-------|
| " | 4 | 45/64 | " | " | " | 1 | @ | .93 | 16.50 |
| " | " | " | " | " | " | 2 | @ | 1.81 | 66.96 |
| " | 6 | 25/32 | " | " | " | 1 | @ | .93 | 37.44 |
| " | 7 | 31/32 | " | " | " | | | 1.063 | 8.80 |
| " | 29 | 1 1/8 | " | " | " | | | 1.54 | 1.89 |
| " | 8 | 1 1/4 | " | " | " | | | 3.18 | 3.96 |
| " | 37 | 1 3/8 | " | " | " | 36 | @ | 2.64 | 20.48 |
| " | " | " | " | " | " | 1 | @ | 3.12 | 11.04 |
| " | 2 | 3/4 Carb. Fluted Shell Reamers. | | | | | | 4.23 | 3.44 |
| " | " | " | | | | | | 1.68 | 7.74 |
| " | 6 | 7/8 H. S. | " | " | " | | | 2.75 | 4.32 |
| " | 12 | 7/8 " " Spiral Reamers. | | | | | | 5.58 | 7.72 |
| " | 6 | 1" " " " | | | | | | 6.24 | 12.30 |
| " | 8 | 1 3/64 Carb. Fluted | " | " | " | 5 | @ | 1.76 | 11.88 |
| " | " | " | " | " | " | 1 | @ | 1.89 | 3.84 |
| " | 2 | 1 3/8 H. S. Fluted Reamers. | | | | 2 | @ | 1.98 | 7.20 |
| " | 4 | 1 1/2 Carb. | " | " | " | | | 10.24 | 2.47 |
| " | 3 | 1 5/8 Carb. Rose Reamers. | | | | 3 | @ | 3.68 | |
| " | 8 | 1 5/8 " Fluted | " | " | " | 1 | @ | 3.44 | |
| " | " | " | " | " | " | 2 | @ | 3.87 | |
| " | " | " | " | " | " | 1 | @ | 4.32 | |
| " | " | " | " | " | " | 2 | @ | 3.86 | |
| " | " | " | " | " | " | 3 | @ | 4.10 | |
| " | " | " | " | " | " | 2 | @ | 5.94 | |
| " | " | " | " | " | " | 1 | @ | 3.84 | |
| " | 2 | 5/8 Hand Expansion Reamers. | | | | | | 3.60 | |
| " | 1 | 3/4 " Carb. | " | " | " | | | 2.47 | |

Inventory of Supplies.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|-------------|-----------|-----------------------------|---------------|-------------|--------------|
| " | 2 | 1½ " " | ..... | 1 @ 6.48 | 6.48 |
| " | 1 | 7/8 H. S. Mach. | ..... | 1 @ 5.76 | 5.76 |
| " | 1 | 7/8 Hand Expansion | ..... | 2.07 | 2.07 |
| " | 4 | 1½ H. S. Rose Taper Reamers | ..... | 2.79 | 2.79 |
| " | 7 | 2" " Shell | ..... | 21.35 | 85.40 |
| " | 7 | 1¾ Fluted Shell Reamers | ..... | 5.32 | 37.24 |
| " | 12 | #3 Taper Pin Reamers | ..... | 4.32 | 51.84 |
| " | 15 | #4 " " | ..... | 4.35 | 65.25 |
| " | 12 | #6 " " | ..... | 1.13 | 13.56 |
| " | 12 | #7 " " | ..... | 1.31 | 15.72 |
| " | 3 | 5/16 T. S. Chucking Reamers | ..... | 1.69 | 5.07 |
| " | 16 | 3/8 " " | ..... | 1.88 | 30.08 |
| " | 4 | 7/16 " " | ..... | 1.25 | 5.00 |
| " | 3 | 9/16 " " | ..... | 1.49 | 4.47 |
| " | 8 | 5/8 " " | ..... | 1.53 | 12.24 |
| " | 8 | 5/8 " " | ..... | 1.93 | 15.44 |
| " | 8 | 5/8 " " | ..... | 6.59 | 52.72 |
| Total | | | | | 885.53 |

Sheet #8.

Contract 1498.

Inventory of Supplies.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|-------------|-----------|-------------------------|---------------|-------------|--------------|
| 36 | 14 | 1/4 Carb. Hand Reamers. | ..... | 1.26 | 17.64 |
| " | 15 | " | ..... | 1.21 | 14.52 |
| | | | | 12 @ | |
| " | 11 | " | ..... | 1.44 | 4.32 |
| " | 7 | " | ..... | 1.67 | 18.37 |
| " | 11 | " | ..... | 1.71 | 11.97 |
| | | | | 8 @ | |
| " | 50 | " | ..... | 1.80 | 14.40 |
| | | | | 3 @ | |
| " | 50 | " | ..... | 1.62 | 4.86 |
| | | | | 48 @ | |
| " | 9 | " | ..... | 1.65 | 79.20 |
| " | 2 | " | ..... | 1.87 | 3.74 |
| " | 2 | " | ..... | 2 | |
| | | Spiral Hand Reamers. | ..... | 1.98 | 17.82 |
| " | 2 | " | ..... | 2.79 | 5.58 |
| " | 2 | " | ..... | 2.96 | 5.92 |
| | | Hand Reamers | ..... |  |  |
| | | " | | | |
| 116 | | | | | |
| " | 6 | " | ..... | 3.68 | 22.08 |
| " | 6 | " | ..... | 4.20 | 25.20 |
| " | 1 | " | ..... | 6.41 | 6.41 |
| " | 2 | " | ..... | 1.26 | 2.52 |
| | | 600 Lbs. | | | |
| Total | | | | | 254.55 |

Sheet #9.

Contract 1498.

Inventory of Supplies.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|-----------------------------|---------------|-------------|--------------|
| 37 | 6 | 1 9/16 T. S. Carbon Drills. | ..... | 4.53 | 27.18 |
| " | 6 | " | ..... | @ 4.99 | 9.98 |
| 117 | | 15/8 | ..... | @ 5.02 | 15.06 |
| " | 16 | 17/32 | ..... | @ 6.83 | 6.83 |
| " | 18 | 1 1/2 | ..... | 2.49 | 39.84 |
| " |  |  | ..... | 4.20 | 4.20 |
| " |  |  | ..... | @ 4.12 | 45.32 |
| " |  |  | ..... | @ 4.07 | 24.42 |
| " |  |  | ..... | 8.13 | 16.26 |
| " | 2 | 1 3/4 | ..... | 1.08 | 6.48 |
| " | 6 | 51/64 | ..... | 7.69 doz. | 7.05 |
| " | 11 | #29 | ..... | 1.39 | 33.36 |
| " | 24 | 3/4 | ..... | 1.64 | 118.08 |
| " | 72 | 5/16 | ..... | 1.26 | 3.78 |
| " | 3 | 11/32 | ..... | 2.70 | 191.70 |
| " | 71 | 17/32 | ..... | 3.48 | 24.36 |
| " | 7 | 9/16 | ..... | 3.68 | 66.24 |
| " | 18 | 5/8 | ..... | 5.91 | 29.55 |
| " | 5 | 51/64 | ..... | 5.91 | 35.46 |
| " | 6 | 13/16 | ..... | 8.00 | 48.00 |
| " | 6 | 27/32 | ..... | 15.05 | 90.30 |
| " | 6 | 1 3/16 | ..... | 38.95 | 194.75 |
| " | 5 | 1 11/16 | ..... |  |  |

| | | | | | | | |
|---|----|---------|---------------------|-------|-------|--------|--------|
| " | 2 | 1 1/16 | H. S.-T. S. Drills. | ..... | ..... | 11.424 | 22.85 |
| " | 3 | 1 3/16 | " | " | ..... | 14.41 | 43.23 |
| " | 1 | 2" | " | " | ..... | 58.83 | 58.83 |
| " | 11 | 1 31/32 | " | " | ..... | 56.70 | 170.10 |
| | | | | | | @ | 341.10 |
| | | | | | | @ | 113.50 |
| " | 3 | 1 15/16 | " | " | ..... | 54.63 | 163.89 |
| " | 2 | 1 7/8 | " | " | ..... | 50.46 | 100.92 |
| " | 3 | 1 13/16 | " | " | ..... | 46.26 | 138.78 |
| " | 5 | 1 23/32 | " | " | ..... | 40.35 | 201.75 |
| " | 3 | 1 3/4 | " | " | ..... | 42.06 | 126.18 |
| " | 6 | 63/64 | " | " | ..... | 13.36 | 80.16 |
| " | 7 | 13 1/4 | Shell | " | ..... | 19.38 | 135.66 |
| " | 32 | 5/16 | T. S. H. S. | " | ..... | @ | 10.52 |
| | | | | | | @ | 1.754 |
| " | 12 | 9/16 | " | " | ..... | 6 | 9.90 |
| " | 28 | 5/8 | " | " | ..... | @ | 41.76 |
| " | 4 | 41/64 | " | " | ..... | 6 | 103.04 |
| | | | | | | @ | 16.16 |
| | | | | | | @ | 36.72 |
| " | 9 | 21/32 | " | " | ..... | 1 | 3.61 |
| " | 6 | 31/32 | " | " | ..... | 5 | 22.99 |
| | | | | | | @ | 58.23 |
| " | 11 | 13/32 | " | " | ..... | @ | 12.79 |
| " | 9 | 53/64 | " | " | ..... | @ | 52.00 |
| " | 1 | 1 3/32 | " | " | ..... | @ | 45.54 |
| " | 4 | 1 1/8 | " | " | ..... | @ | 115.74 |
| " | 3 | 1 7/32 | " | " | ..... | @ |  |
| " | 6 | 1 5/16 | " | " | ..... | @ |  |

Inventory of Supplies.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|------------|---------------|-------------|--------------|
| " | 1 | 1 3/8 | " | | |
| " | 2 | 1 7/16 | " | 21.32 | 21.32 |
| " | 3 | 1 1/2 | " | 24.41 | 48.82 |
| " | 3 | 1 9/16 | " | 27.16 | 81.48 |
| " | 3 | 1 19/32 | " | 31.92 | 95.76 |
| " | 2 | 1 5/8 | " | 33.63 | 100.89 |
| " | 4 | 1 11/16 | " | 35.28 | 70.56 |
| | | " | " | 3 @ 38.67 | 116.01 |
| | | " | " | 1 @ 26.56 | 26.56 |
| 120 | | Sheet #10. | 700# | | \$3,826.28 |

Contract 1498.

Inventory of Supplies.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|---------------------------------|---------------|-------------|--------------|
| #38 | 134 1/2 # | 1/8" String Solder | | 132# @ .484 | 63.89 |
| " | 7 | 3 to 4 Taper Sleeves | | 2 1/2 @ .40 | 1.00 |
| " | 8 | " | | 1.35 | 9.45 |
| " | 10 | " | | 1.08 | 8.64 |
| " | 2 | #3-S-S Arbor for shell reamers. | | .81 | 8.10 |
| " | 3 | #3-T-S " | | 2.64 | 5.28 |
| " | 1 | #5-T-S " | | 2.75 | 8.25 |
| " | 6 | #2 Tool Holders | | 3.42 | 3.42 |

Inventory of Supplies.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|--|---------------|-------------|------------------|
| #40 | 360' | 4" Double | ..... | .858 " | 308.88 |
| " | 300' | " | ..... | .462 " | 138.60 |
| " | 281' 6" | " | ..... | .184 " | 78.20 |
| " | 425' | 1½ Single | #510 | .46 " | 129.49 |
| " | 257' | 3" Double | ..... | .68 " | 174.76 |
| #41 | 2 Sets | Jaws for King Boring Mill | ..... | 74.52 set | 149.04 |
| " | 1 " | Yoke | ..... |  |  |
| " | 1 | Gear Shifter | ..... |  |  |
| " | 2 | Bevel Gear for Clutch Drive | ..... | 46.60 lot | 46.60 |
| " | 4 | Gear Clutch quick return | ..... |  |  |
| " | 1 | Friction Gear (this price includes cost of clutch Gear in case #43) for Pittsburg Lathe | ..... |  |  |
| 123 | | | | 23.47 " | 23.47 |
| " | 1 | Pinion Gear for table drive | ..... |  |  |
| " | 1 | " | ..... | 36.44 | 36.44 |
| " | 1 | " " comb | ..... | 34.45 | 34.45 |
| " | 1 | " " back | ..... | 36.83 | 36.83 |
| " | 3 Sets | Bevel " " Reverse | 390 # | 14.00 set | 42.00 |
| | | | | | <hr/> \$2,806.61 |

Sheet #11.

Contract 1498.

Inventory of Supplies.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|--|---------------|-------------|--------------|
| #42 | 1 | Spindle & Bushing for Std. Engine. | ..... | 31.95 | 31.95 |
| " | 1 | Rack Pinion Gear for 32" Bridgeford Lathe. | ..... | 12.70 | 12.70 |
| " | 1 | " " " | ..... | 12.51 | 12.51 |
| " | 9 | Vice Screws and Nuts. | ..... | 2.16 | 19.44 |
| 124 | | | | | |
| " | 2 | Fan Wheels for Full Flow Pump. | ..... | 1.00 | 2.00 |
| " | 5 | Glands | ..... | .53 | 2.65 |
| " | 3 | Pinion Gears. | ..... | .75 | 2.25 |
| " | 3 | Pkg. Packing | ..... | .25 | .75 |
| " | 2 | H 014 Bevel Gears for Giddings & Lewis. | ..... | 10.00 | 20.00 |
| " | 2 | H 39 " " " | ..... | 8.90 | 17.80 |
| " | 1 | Cross Feed Nut " " " | ..... | 4.20 | 4.20 |
| " | 2 | Quick Return Shaft Gears " " " | ..... | 11.53 | 23.06 |
| " | 1 | " " Mitre " " " | ..... | 4.20 | 4.20 |
| " | 2 | H 055 Shaft " " " | ..... | 2.75 | 5.50 |
| " | 2 | H 056 " " " | ..... | 2.25 | 4.50 |
| " | 1 | Table Feed Bevel Gear " " " | ..... | 4.74 | 4.74 |
| " | 2 | H 55 Gears for Giddings & Lewis. | ..... | 9.35 | 18.70 |
| " | 4 | H033 Clutch " " " | ..... | 7.12 | 28.48 |
| " | 4 | Key for table Gears " " " | ..... | .233 | .93 |
| " | 3 | Bevel Gear for Quick return. | ..... | 4.20 | 12.60 |
| " | 2 | Spindle clutch lever Giddings & Lewis. | ..... | 1.93 | 3.86 |
| " | 1 | #1102 Collar for K & O. | ..... | 2.64 | 2.64 |

Inventory of Supplies.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|--|---------------|-------------|--------------|
| 125 | | | | | |
| " | 1 | Double Bevel Gear Sleeve for Le Blond. | 270# | 5.36 | 5.36 |
| #43 | 4 | 4 1/2 Reed Vice. | ..... | 13.44 | 53.76 |
| " | 1 | Friction Clutch Gear (see gear in Case 41) | ..... |  |  |
| #44 | 9 | Steel Drawers. | 400# | | |
| #45 | 9 | " | ..... |  |  |
| #46 | 9 | " | ..... | 4.77 ea | 42.93 |
| #47 | 9 | " | ..... | 4.77 " | 42.93 |
| #48 | 9 | " | ..... | 4.77 " | 42.93 |
| #49 | 9 | " | ..... | 4.77 " | 42.93 |
| #50 | 9 | " | ..... | 4.77 " | 42.93 |
| #51 | 9 | " | ..... | 4.77 " | 42.93 |
| #52 | 9 | " | ..... | 4.77 " | 42.93 |
| #53 | 10 | " | ..... | 4.77 " | 47.70 |
| " | 27 | 3/4 x 22" Machine Bolts. | ..... | 22.69 C | 6.13 |
| " | 28 | 3/4 x 24" " | ..... | 24.34 " | 6.82 |
| " | 26 | 3/4 x 26" " | ..... | 25.99 " | 6.76 |
| #54 | 78 | 3/4 x 6" " | 300# | 9.02 " | 7.04 |
| " | 56 | 3/4 x 7" " | ..... | 10.31 " | 5.77 |
| " | 23 | 3/4 x 5" " | ..... | 8.66 " | 1.99 |
| 126 | | | | | |
| " | 45 | 3/4 x 8" " | ..... | 8.02 " | 3.61 |
| " | 19 | 3/4 x 3" " | ..... | 6.66 " | 1.27 |
| " | 96 | 3/4 x 2" " | ..... | 6.19 " | 5.94 |
| " | 13 | 3/4 x 9" " | ..... | 11.36 " | 1.48 |
| " | 102 | 3/4 x 8 1/2" " | ..... | 11.35 " | 11.58 |
| #55 | 31 | 5/8 x 12" " | 485# | 7.12 | 2.21 |

5.06 " 1.11
6.47 " 2.91
6.68 " 1.94
7.84 " 7.92
\$763.62

Sheet #12.

Contract 1498.

Inventory of Supplies.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|---------------|---------------|-------------|--------------|
| #56 | 46 | Machine Bolts | | 4.98 C | 2.29 |
| " | 57 | " | | 3.13 " | 1.78 |
| " | 64 | " | | 3.87 " | 2.48 |
| " | 43 | " | | 5.47 " | 2.35 |
| " | 61 | " | | 5.90 " | 3.60 |
| #57 | 150 | " | 160# | 1.83 " | 1.83 |
| " | 193 | " | | 1.37 " | .69 |
| " | 43 | " | | 2.02 " | 2.02 |
| " | 43 | " | | 1.52 " | .76 |
| " | 43 | " | | 1.92 " | .83 |
| " | 43 | " | | 1.44 " | .62 |
| 128 | | | | 1.54 " | .66 |
| " | 38 | " | | 1.30 " | .49 |
| " | 60 | " | | 1.54 " | .92 |
| " | 79 | " | | 1.26 " | 1.00 |

Inventory of Supplies.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|--------------|---------------|-------------|--------------|
| " | 90 | 1/4 x 2 | " | 1.06 " | .95 |
| " | 75 | 1/4 x 2 1/2 | " | 1.12 " | .84 |
| " | 78 | 1/4 x 3 | " | 1.16 " | .90 |
| #58 | 183 | 1/2 x 4 1/2 | 100 # | 3.68 " | 6.73 |
| " | 166 | 1/2 x 3 | " | 3.23 " | 3.23 |
| " | 150 | 1/2 x 4 | " | 3.13 " | 2.07 |
| #59 | 70 | 1/4 x 2 1/2 | 165 # | 3.50 " | 5.25 |
| " | 27 | 5/16 x 1 1/4 | " | .88 " | .62 |
| " | 92 | 1/4 x 3 | " | .98 " | .26 |
| " | 144 | 1/4 x 4 | " | .95 " | .87 |
| #60 | 195 | 1/4 x 2 | " | 1.63 " | 1.63 |
| " | 47 | 1/4 x 3 | " | 1.67 " | .73 |
| " | 72 | 1/4 x 5 | " | 1.72 " | 3.35 |
| 129 | | Lag Screws | " | 1.71 " | .80 |
| " | | " | " | 1.64 " | 1.18 |
| " | 100 | 5/16 x 2 | " | 2.13 " | 2.13 |
| " | 170 | 3/8 x 2 | " | 2.07 " | 3.52 |
| " | 99 | 3/8 x 4 | " | 2.40 " | 2.38 |
| " | 44 | 3/8 x 2 1/2 | " | 2.25 " | .99 |
| " | 60 | 3/8 x 3 | " | 1.57 " | .94 |
| " | 89 | 1/2 x 1 1/2 | " | 2.63 " | 2.34 |
| " | 22 | 1/2 x 2 | " | 2.63 " | .58 |
| " | 26 | 1/2 x 2 1/2 | " | 3.13 " | .81 |

[illegible]

Sheet #13.

Contract 1498.

Inventory of Supplies.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|--------------------------------|---------------|-------------|--------------|
| #62 | 64 | 3/16 x 1 1/2 F. H. Stove Bolts | ..... | .26 C | .17 |
| " | 48 | 3/16 x 3/4 " " | ..... | .26 " | .12 |
| " | 250 | 3/16 x 1 R. H. " " | ..... | .41 " | 1.03 |
| " | 216 | 3/16 x 2 " " | ..... | .54 " | 1.17 |
| 131 | | | | | |
| " | 100 | 1/4 x 1 " " | ..... | .59 " | .59 |
| " | 119 | 1/4 x 2 " " | ..... | .72 " | .86 |

Inventory of Supplies.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|---------------|---------------|-------------|--------------|
| " | 34 | 1/4 x 5/8 | ..... | 1.63 " | .55 |
| " | 131 | 1/4 x 1 1/2 | ..... | 100 @ | 2.27 |
| " | 342 | 5/16 x 3/4 | ..... | 31 @ | .86 |
| " | 211 | 5/16 x 1 1/4 | ..... | 200 @ | 7.70 |
| " | 40 | 5/16 x 1 1/2 | ..... | 11 @ | 5.26 |
| " | 102 | 3/8 x 3/4 | ..... | 2 @ | .26 |
| " | 200 | 3/8 x 1 | ..... | 2 @ | 1.12 |
| " | 181 | 3/8 x 1 1/4 | ..... | 100 @ | .06 |
| " | 131 | 3/8 x 1 1/2 | ..... | 100 @ | 2.63 |
| " | 119 | 7/16 x 1 | ..... | 100 @ | 2.82 |
| " | 33 | 7/16 x 1 1/4 | ..... | 100 @ | 5.64 |
| " | 30 | 7/16 x 1 1/2 | ..... | 100 @ | 5.43 |
| " | 205 | 1 1/2 x 1 | ..... | 19 @ | 2.76 |
| " | 93 | 1 1/2 x 1 1/4 | ..... | 31 @ | .99 |
| " | 96 | 1 1/2 x 1 1/2 | ..... | 100 @ | 3.19 |
| " | 156 | 1 1/2 x 1 3/4 | ..... | 19 @ | .52 |
| " | 93 | 1 1/2 x 1 1/4 | ..... | 2.93 " | .97 |
| " | 30 | 7/16 x 1 1/2 | ..... | 100 @ | .93 |
| " | 205 | 1 1/2 x 1 | ..... | 100 @ | 3.98 |
| " | 93 | 1 1/2 x 1 1/4 | ..... | 100 @ | 3.65 |
| " | 96 | 1 1/2 x 1 1/2 | ..... | 5 @ | .20 |
| " | 156 | 1 1/2 x 1 3/4 | ..... | 4.20 " | 3.91 |
| " | 93 | 1 1/2 x 1 1/4 | ..... | 100 @ | 4.25 |
| " | 96 | 1 1/2 x 1 1/2 | ..... | 100 @ | 4.43 |
| " | 156 | 1 1/2 x 1 3/4 | ..... | 100 @ | 4.95 |

[illegible]

134

Sheet #14.

Contract 1498.

Inventory of Supplies.

| Case No. | Quantity. | Article. | Hex. Hd. Cap Screw | Gross weight. | Price each. | Total price. |
|----------|-----------|----------|-----------------------------------|---------------|-------------|--------------|
| 65 | 140 | | $\frac{3}{8} \times \frac{3}{4}$ | ..... | 2.25 | 3.15 |
| " | 181 | | $\frac{3}{8} \times 1\frac{1}{4}$ | ..... | 2.55 | 4.62 |
| " | 22 | | $\frac{3}{8} \times 1\frac{1}{2}$ | ..... | 2.03 | .45 |
| " | 250 | | $7/16 \times 1"$ | ..... | 2.94 | 7.35 |
| " | 19 | | $7/16 \times 1\frac{1}{4}$ | ..... | 3.18 | .60 |
| " | 194 | | $7/16 \times 1\frac{1}{2}$ | ..... | 3.42 | 6.63 |
| 66 | 347 | | $\frac{1}{2} \times 1$ | 95 Lbs. | 200 @ | 7.68 |
| " | 226 | | $\frac{1}{2} \times 1\frac{1}{4}$ | ..... | 100 @ | 3.54 |
| " |  |  |  | ..... | 47 @ | 2.66 |
| 135 |  |  |  | ..... | 200 @ | 1.25 |
| " | 161 | | $\frac{1}{2} \times 1\frac{1}{2}$ | ..... | 26 @ | 7.80 |
| " | 252 | | $\frac{1}{2} \times 1\frac{3}{4}$ | ..... |  | .76 |
| " | 338 | | $\frac{1}{2} \times 2$ | ..... |  |  |
| " | 195 | | $\frac{1}{2} \times 2\frac{1}{2}$ | ..... | 100 @ | 6.86 |
| " | 56 | | $\frac{1}{2} \times 3$ | ..... | 152 @ | 3.46 |
| 67 | 188 | | $\frac{1}{2} \times 3\frac{1}{2}$ | ..... |  | 7.02 |
| " | 158 | | $\frac{5}{8} \times 1\frac{1}{2}$ | 185# | 4.98 | 16.83 |
| " |  |  |  | ..... | 5.77 | 11.25 |
| " |  |  |  | ..... | 6.42 | 3.60 |
| " |  |  |  | ..... | 88 @ | 4.87 |
| " |  |  |  | ..... | 100 @ | 7.38 |

| | | | | | | | | | | | | | |
|-----|-------------|---|---|---|---|---|---|---|---|-------|-------------|---|-------|
| 194 | 5/8 x 2 1/2 | " | " | " | " | " | " | " | " | ..... | 100 @ 6.12 | C | 6.12 |
| " | 5/8 x 3 | " | " | " | " | " | " | " | " | ..... | 50 @ 8.16 | C | 4.08 |
| " | 5/8 x 4 | " | " | " | " | " | " | " | " | ..... | 44 @ 6.12 | C | 2.69 |
| 136 |  | " | " | " | " | " | " | " | " | ..... | 50 @ 9.12 | C | 4.56 |
| 68 | 5/8 x 3 1/2 | " | " | " | " | " | " | " | " | ..... | 34 @ 7.00 | C | 2.38 |
| " | 5/8 x 4 1/2 | " | " | " | " | " | " | " | " | ..... | 50 @ 11.94 | C | 5.97 |
| " | 3/4 x 2 1/2 | " | " | " | " | " | " | " | " | ..... | 48 @ 9.95 | C | 4.78 |
| " | 3/4 x 2 1/2 | " | " | " | " | " | " | " | " | ..... |  |  |  |
| " | 3/4 x 3 | " | " | " | " | " | " | " | " | ..... |  |  |  |
| " | 3/4 x 3 1/2 | " | " | " | " | " | " | " | " | ..... |  |  |  |
| 69 | 3/4 x 4 | " | " | " | " | " | " | " | " | ..... | 200 @ 10.38 | C | 20.76 |
| " | 7/8 x 2 1/2 | " | " | " | " | " | " | " | " | ..... | 23 @ 7.79 | C | 1.79 |
| " | 7/8 x 3 | " | " | " | " | " | " | " | " | ..... | 10.13 | C | 7.60 |
| " | 7/8 x 3 1/2 | " | " | " | " | " | " | " | " | ..... | 9.30 | C | 2.05 |
| " | 1 x 3 | " | " | " | " | " | " | " | " | ..... | 10.50 | C | 5.46 |
| " | 1 x 3 1/2 | " | " | " | " | " | " | " | " | ..... | 12.36 | C | 5.19 |
| " | 1 x 4 | " | " | " | " | " | " | " | " | ..... | 100 @ 14.22 | C | 14.22 |
| 70 | 1 x 4 1/2 | " | " | " | " | " | " | " | " | ..... | 24 @ 10.66 | C | 2.56 |
| 137 |  | " | " | " | " | " | " | " | " | ..... | 16.14 | C | 16.95 |
| " | 1 x 6 | " | " | " | " | " | " | " | " | ..... | 14.22 | C | 4.69 |
| " | 1 1/8 x 4 | " | " | " | " | " | " | " | " | ..... | 11.88 | C | 1.43 |
| " | 1 1/4 x 5 | " | " | " | " | " | " | " | " | ..... | 18.00 | C | 39.78 |
|  |  | " | " | " | " | " | " | " | " | ..... | 20.40 | C | 6.12 |
|  |  | " | " | " | " | " | " | " | " | ..... | 22.30 | C | 8.47 |
|  |  | " | " | " | " | " | " | " | " | ..... | 5.80 | C | 1.29 |
|  |  | " | " | " | " | " | " | " | " | ..... | 28.50 | C | 28.50 |
| | | " | " | " | " | " | " | " | " | | | | |
|  |  | " | " | " | " | " | " | " | " | ..... | 36.60 | C | 5.49 |
|  |  | " | " | " | " | " | " | " | " | ..... | 33.60 | C | 7.39 |
|  |  | " | " | " | " | " | " | " | " | ..... | 48.30 | C | 8.21 |

Inventory of Supplies.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-------------|-----------------------|---------------|-------------|--------------|
| " | 356 | 1" Semi Hex Nuts..... | | 300 @ 8.94 | C 26.82 |
| " | 25 | " " "..... | | 56 @ 8.67 | C 4.86 |
| " | 6 | " " "..... | | .16 ea. | 4.00 |
| " | 22 | " " "..... | | .16 " | .96 |
| " | 12 | " " "..... | | .27 " | 5.94 |
| " | 31 | " " "..... | | .0414 " | .50 |
| " | 115 | " " "..... | | 5.94 C | 1.84 |
| " | 146 | " " "..... | | 4.47 C | 5.14 |
| | | " " "..... | 535# | 3.22 C | 4.70 |
| | Total | | | | 404.57 |

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Sheet #15.

Contract 1498.

Inventory of Supplies.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|-----------------------------------|---------------|-------------|--------------|
| 71 | 132 | 1/4" Semi. Hex. Nuts..... | | .99 C | 1.31 |
| " | 86 | " " "..... | | 1.24 C | 1.07 |
| " | 200 | " " "..... | | 1.85 C | 3.70 |
| " | 37 | " " "..... | | 2.23 C | .83 |
| " | 190 | 1/2" Castle " "..... | | 4.20 C | 7.98 |
| " | 51 | 1 1/4" Black " "..... | | .11 lb. | 4.40 |
| " | 26 | 3/8 x 1 1/4" Allen Set Screw..... | 40 lb. | | |

| | | | | | | | |
|-----|-------------------------------------|---------------------|---|---|---|----------|--------|
| 369 | 7/16 x 1 | " | " | " | " | 8.19 C | 8.11 |
| " | 1/2 x 1/2 | " | " | " | " | 6.30 C | 10.65 |
| " | 1/2 x 9/16 | " | " | " | " | 6.40 C | 9.86 |
| " | 1/2 x 1 | " | " | " | " | 9.50 C | 1.05 |
| 139 | | | | | | | |
| 196 | 1/2 x 1 1/2 | " | " | " | " | 11.12 C | 21.80 |
| 37 | 3/4 x 7/8 | " | " | " | " | 13.73 C | 5.08 |
| 12 | 1 x 3 | " | " | " | " | 40.72 C | 4.89 |
| 82 | 1/2 x 14-20 | Brass Mach. Screws. | " | " | " | 1.83 Gr. | 1.04 |
| 62 | 3/4 x 10-24 | " | " | " | " | .48 Gr. | .21 |
| 79 | 3/4 x 14-20 FH | " | " | " | " | .472 Gr. | .26 |
| 124 | 1 1/4 x 14-20 FH Brass Mach. Screw. | " | " | " | " | .653 Gr. | .56 |
| 57 | 1" x 10-24 Fil. Mach. Screw. | " | " | " | " | .63 Gr. | .25 |
| 301 | 1 x 10-32 | " | " | " | " | .63 Gr. | 1.32 |
| 72 | 1/4 x 1 | Sq. Hd. Set Screw. | " | " | " | 1.18 C | 1.06 |
| " | 5/16 x 1 | " | " | " | " | 1.29 C | 2.58 |
| " | 5/16 x 1 1/4 | " | " | " | " | 1.38 C | 2.68 |
| " | 5/16 x 1 1/2 | " | " | " | " | 1.49 C | 2.31 |
| " | 3/8 x 3/4 | " | " | " | " | 1.38 C | 3.99 |
| " | 3/8 x 1 | " | " | " | " | 1.46 C | 3.34 |
| " | 3/8 x 1 1/4 | " | " | " | " | 1.14 C | 1.14 |
| 140 | | | | | | 1.57 C | 3.14 |
| " | 3/8 x 1 1/2 | " | " | " | " | 1.17 C | .59 |
| " | | | | | | @ | |
| 182 | 3/8 x 1 1/2 | " | " | " | " | 100 | 1.95 C |
| " | | | | | | 200 | 1.70 C |
| 222 | 3/8 x 1 3/4 | " | " | " | " | 50 | 1.93 C |
| " | | | | | | @ | |
| 321 | 3/8 x 2 | " | " | " | " | 22 | 1.60 C |
| " | | | | | | @ | |
| " | | | | | | 100 | 2.20 C |
| " | | | | | | 82 | 1.95 |
| " | | | | | | 200 | 1.39 |
| " | | | | | | 22 | 3.86 |
| " | | | | | | @ | .35 |
| " | | | | | | @ | 7.06 |

Inventory of Supplies.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|-----------------------|---------------|--------------|--------------|
| " | 136 | $\frac{3}{8}$ x 2 1/4 | ..... | 100 @ 2.48 C | 2.48 |
| " | 135 | $\frac{3}{8}$ x 2 1/2 | ..... | 36 @ 1.80 C | .65 |
| " | 47 | $\frac{3}{8}$ x 2 3/4 | ..... | ..... | 3.71 |
| " | 220 | $\frac{3}{8}$ x 3 | ..... | ..... | 1.03 |
| " | 54 | 7/16 x 3/4 | ..... | ..... | 7.26 |
| " | 26 | 7/16 x 1 | ..... | ..... | 1.34 |
| " | 87 | 7/16 x 1 1/4 | ..... | ..... | .44 |
| " | 23 | 7/16 x 1 1/2 | ..... | ..... | 1.68 |
| " | 70 | 1 1/2 x 3/4 | ..... | ..... | .37 |
| " | 58 | 1 1/2 x 1 | ..... | ..... | 1.31 |
| " | 335 | 1 1/2 x 1 1/4 | ..... | ..... | 1.43 |
| " | 320 | 1 1/2 x 1 1/2 | ..... | ..... | 7.94 |
| | | | 225 Lbs. | 2.64 C | 8.45 |
| 73 | 148 | 1 1/2 x 1 3/4 | ..... | 100 @ 2.97 C | 2.97 |
| " | 238 | 1 1/2 x 2 | ..... | 48 @ 2.16 C | 1.04 |
| " | 145 | 1 1/2 x 2 1/4 | ..... | 200 @ 3.30 C | 6.60 |
| " | 126 | 1 1/2 x 2 1/2 | ..... | 38 @ 2.40 C | .91 |
| " | 23 | 1 1/2 x 3 | ..... | ..... | 5.38 |
| " | 106 | 5/8 x 1 1/4 | ..... | ..... | 5.20 |
| " | 145 | 5/8 x 1 1/2 | ..... | ..... | 1.14 |
| " | 145 | 5/8 x 1 3/4 | ..... | ..... | 3.79 |
|  |  |  | ..... | ..... | 5.79 |
|  |  |  | ..... | ..... | 3.20 |
|  |  |  | ..... | ..... | 1.98 |

Inventory of Supplies.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|----------|---------------|-------------|--------------|
| " | 127 | " | " | .48 Gr. | .42 |
| " | 120 | " | " | .86 Gr. | .71 |
| " | 144 | " | " | 1.32 Gr. | 1.32 |
| " | 157 | " | " | .28 Gr. | .31 |
| " | 144 | " | " | .33 Gr. | .33 |
| " | 153 | " | " | .45 Gr. | .47 |
| " | 200 | " | " | .50 Gr. | .70 |
| " | 293 | " | " | 1.44 Gr. | 2.88 |
| " | 142 | " | " | 5 | .05 |
| " | 73 | " | " | .26 Gr. | .26 |
| " | 279 | " | " | .31 Gr. | .16 |
| " | 128 | " | " | .31 Gr. | .31 |
| " | 66 | " | " | .28 Gr. | .26 |
| " | | " | " | .33 Gr. | .29 |
| " | | " | " | .45 Gr. | .20 |
| 144 | | | | | |
| " | 11 | " | " | .71 Gr. | .06 |
| " | 104 | " | " | .85 Gr. | .62 |
| " | 87 | " | " | .99 C | .86 |
| " | 27 | " | " | 4.23 C | 1.14 |
| " | 50 | " | " | 5.16 C | 2.58 |
| " | 80 | " | " | 5.58 C | 4.46 |
| " | 49 | " | " | 7.20 C | 3.53 |
| " | 136 | " | " | 4.61 C | 4.61 |
| " | | " | " | 4.50 C | 1.62 |

| | | | |
|-------|---|--------|-------|
| 100 | @ | 4.59 C | 4.59 |
| 61 | @ | 4.50 C | 2.75 |
| | | 6.89 C | 3.03 |
| 66 | @ | 7.72 C | 5.10 |
| 82 | @ | 7.52 C | 6.16 |
| | | 8.47 C | .51 |
| | | | <hr/> |
| Total | | | 87.35 |

Sheet #17.

Contract 1498.

Inventory of Tools & Fixtures.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|---|---------------|-------------|--------------|
| 84 | 1 | T 3291 Drum Drilling Fixture (Semi) | ..... | 331.64 | 331.64 |
| 76 | 1 | T 2174 Fixture for Milling Slides #51010-1 | ..... | 1,089.27 | 1,089.27 |
| " | 1 | T 2009 Pot Chuck for Rec. Cyl. #94159-1 | ..... | 91.20 | 91.20 |
| 83 | 1 | T 3151 Drill Jig for Covers #49876-2 & 49877-2 | ..... | 382.94 | 382.94 |
| " | 1 | G 3036 Test Block for Sight Bar #49875-1 | ..... | 312.73 | 312.73 |
| " | 1 | T 3202 Scraping Fixture for Yoke #50795-1 | ..... | 178.01 | 178.01 |
| " | 1 | T 3276 " " " | ..... | 90.58 | 90.58 |
| 81 | 1 | G 3053 Gauging & Assembling Fixture for Sight & Slide | ..... | 621.20 | 621.20 |
| 82 | 1 | G 3053 Gauging & Assembling Fixture for Sight & Slide | ..... | 621.20 | 621.20 |
| 77 | 1 | T 3211 Rad. Mill. Fixture for S. Bar #49875-1 | ..... | 821.34 | 821.34 |
| 79 | 1 | T 3211 " " " " | ..... |  |  |
| 80 | 1 | T 2008 Fixture for facing & drilling seats on slides #51010-1 | ..... | 990.28 | 990.28 |

Inventory of Tools & Fixtures.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|--|---------------|-------------|--------------|
| 146 | | | | | |
| 78 | 1 | T 2007 Fixture for Boring Slide Liners and Cylinder Housing in Slide #51010-1..... | ..... | 1,105.99 | 1,105.99 |
| 86 | 1 | T 1285 2 $\frac{5}{8}$ Cutter..... | ..... | 11.10 | 11.10 |
| " | 3 | T 3168 Pilot Counterbore..... | ..... | 14.77 | 44.31 |
| " | 3 | T 3325 .800" Dia. Counterbore..... | ..... | 8.12 | 24.36 |
| " | 2 | T 3326 .700" "..... | ..... | 6.13 | 12.26 |
| " | 3 | T 2202 Counterbore..... | ..... | 18.09 | 54.27 |
| " | 3 | T 3263 Profile Cutters..... | ..... | 7.39 | 22.17 |
| " | 3 | T 1168 Form Counterbore..... | ..... | 8.03 | 24.09 |
| " | 5 | T 1141 Finish Cutters..... | ..... | 3.38 | 16.90 |
| " | 3 | T 1073 Rough Bor. Bar..... | ..... | 118.75 | 356.25 |
| " | 6 | T 1044 " Cutter..... | ..... | 6.44 | 38.64 |
| " | 4 | T 1082 Facing Cutter..... | ..... | 4.37 | 17.48 |
| " | 8 | T 1078 Finish "..... | ..... | 3.23 | 25.84 |
| " | 3 | T 1139 2nd Boring Bar..... | ..... | 37.37 | 112.11 |
| " | 6 | T 1039 Facing Cutters..... | ..... | 2.29 | 13.74 |
| " | 7 | T 1140 Rough "..... | ..... | 3.55 | 24.85 |
| 147 | | | | | |
| " | 8 | T 1122 " Bor. Cutters..... | ..... | 5.98 | 47.04 |
| " | 6 | T 1143 "..... | ..... | 6.54 | 39.24 |
| " | 6 | T 3162 Facing Bar..... | ..... | 5.57 | 33.42 |
| " | 12 | T 1123 Finish Cutters..... | ..... | 3.22 | 38.64 |
| " | 6 | T 1202 Threading Tools..... | ..... | 4.20 | 25.20 |

| | | | | | |
|---|----|--------|------------------|-------|--------|
| " | 2 | T 3223 | 3 1/4 Cutters. | ..... | 53.96 |
| " | 1 | T 3319 | Facing " | ..... | 32.33 |
| " | 3 | T 2188 | End Mills. | ..... | 90.42 |
| " | 5 | T 3170 | " | ..... | 102.80 |
| " | 4 | T 2184 | " | ..... | 192.60 |
| " | 2 | T 2003 | Form Cutters. | ..... | 3.50 |
| " | 1 | T 2004 | 2nd Hollow Mill. | ..... | 278.30 |
| " | 9 | T 2038 | #10 Cutters. | | 119.79 |
| " | 10 | T 2039 | #7 " | | 109.30 |
| " | 2 | T 2030 | #4 " | | 22.80 |
| " | 5 | T 2040 | #12 " | | 83.60 |
| " | 4 | T 2032 | #5 " | | 91.24 |
| " | 4 | T 2033 | #3 " | | 70.04 |

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| | | | | | |
|-------------|----|--------|----------------------|-------|----------|
| " | 3 | T 3196 | 11/16 Drills. | | 10.99 |
| " | 6 | T 3206 | 1/2" Pilot. | | 6.90 |
| " | 4 | T 3207 | 3/8" Pilot. | | 11.22 |
| " | 3 | T 2171 | 1 x 3/4 " C' Bore. | | 12.32 |
| " | 1 | T 1203 | 1.574 C' Bore. | ..... | 15.05 |
| " | 1 | T 1204 | 1.574 Revel C' Bore. | ..... | 18.76 |
| " | 2 | T 1158 | Slab Mills. | ..... | 114.19 |
| " | 1 | T 3219 | Spiral Slab Mill. | | 160.60 |
| " | 16 | T 2006 | Pes. for Cutters. | | 1.75 |
| " | 1 | T 2022 | 2nd Finish " | | 13.54 |
| Total | | | | | 9,490.31 |

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Sheet #18,

Contract 1498.

Inventory of Tools & Fixtures.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|---------------------------------------|---------------|-------------|--------------|
| 86 | 1 | T 2020 Cutters..... | ..... | 25.95 | 25.95 |
| " | 7 | T 1171 Spot Facers..... | ..... | 7.60 | 53.20 |
| " | 5 | T 2094 1st Tool Cutters..... | ..... | 3.67 | 18.35 |
| " | 2 | T 3190 Facing Cutters..... | ..... | 4.33 | 8.66 |
| " | 5 | T 2024 "..... | ..... | 32.04 | 160.20 |
| " | 1 | T 3270 "..... | ..... | 15.12 | 15.12 |
| " | 5 | T 2016 1st Rough Cutter..... | ..... | 17.08 | 85.40 |
| " | 6 | T 3194 Facing "..... | ..... | 11.97 | 71.82 |
| " | 4 | T 3310 Slitting Saws..... | ..... | 13.06 | 52.24 |
| " | 6 | T 1300 Spot Facers..... | ..... | 14.75 | 88.50 |
| " | 1 | T 1219 Countersink..... | ..... | 18.22 | 18.22 |
| " | 2 | T 2003 Rough Hollow Mills..... | ..... | 456.41 | 912.82 |
| 150 | | | | | |
| " | 10 | T 3137 Cutters..... | ..... | 13.70 | 137.00 |
| " | 9 | T 3137 Side Milling Cutters..... | ..... | 4.86 | 43.74 |
| " | 4 | T 3142 Spiral End Mills..... | ..... | 16.89 | 67.56 |
| " | 5 | T 3238 Shell "..... | ..... | 28.21 | 141.05 |
| " | 12 | T 2207 60 Deg. x 3/4 Countersink..... | ..... | 6.51 | 78.12 |
| " | 5 | T 3308 1/2" End Mills..... | ..... | 8.99 | 44.95 |
| " | 4 | T 3311 60 Deg. 5/16 Countersink..... | ..... | 6.20 | 24.80 |
| " | 3 | T 3204 Notching Cutters..... | ..... | 10.07 | 30.21 |

| | | | | | | | |
|-----|----|---|------|---------------------------|-------|--------|--------|
| " | 1 | T | 3217 | L. H. Slitting Saw 1/4" | ..... | 35.97 | 35.97 |
| " | 1 | T | 3218 | R. H. " " | ..... | 31.15 | 31.15 |
| " | 2 | T | 3309 | End Mills..... | ..... | 20.34 | 40.68 |
| " | 3 | T | 3224 | Sp. End Mills..... | ..... | 10.70 | 32.10 |
| " | 2 | T | 3282 | Facing Cutters..... | ..... | 20.44 | 40.88 |
| " | 1 | T | 3243 | " " | ..... | 75.24 | 75.24 |
| " | 1 | T | 3226 | 2.650" " | ..... | 15.43 | 15.43 |
| " | 5 | T | 3138 | 2" x 1" Mill Cutters..... | ..... | 17.34 | 86.70 |
| " | 2 | T | 1181 | Spot Facers..... | ..... | 7.47 | 14.94 |
| 151 | | | | | | | |
| " | 8 | T | 1170 | " " | ..... | 1.97 | 15.76 |
| 87 | 2 | T | 3210 | Taper Sockets..... | ..... | 78.72 | 157.44 |
| " | 12 | T | 1089 | 1.962 Mach. Taps..... | ..... | 26.00 | 312.00 |
| " | 2 | T | 3209 | 9 x 12 Taper Sockets..... | ..... | 61.76 | 123.52 |
| " | 7 | T | 3237 | Arbor ..... | ..... | 32.03 | 224.21 |
| " | 4 | T | 3244 | Taper Cutters..... | ..... | 20.81 | 83.24 |
| " | 2 | T | 3261 | Cutter Arbor..... | ..... | 24.34 | 48.68 |
| " | 2 | T | 1142 | Spot Facers..... | ..... | 116.62 | 233.24 |
| " | 2 | T | 3272 | Spec. Arbor..... | ..... | 31.51 | 63.02 |
| " | 1 | T | 3222 | Milling " ..... | ..... | 20.04 | 20.04 |
| " | 1 | T | 3141 | Cutter " ..... | ..... | 50.06 | 50.06 |
| " | 1 | T | 1256 | Spot Facer..... | ..... | 79.96 | 79.96 |
| " | 14 | T | 1108 | 1 7/8 Shell Drill..... | ..... | 25.38 | 355.32 |
| " | 12 | T | 2019 | 2nd Cutters..... | ..... | 12.12 | 145.44 |
| " | 3 | T | 1126 | Finish Cutters..... | ..... | 5.69 | 17.07 |
| " | 14 | T | 2017 | Rough " ..... | ..... | 7.21 | 100.94 |
| " | 2 | T | 2044 | " " ..... | ..... | 4.84 | 9.68 |
| " | 1 | T | 2043 | " " ..... | ..... | 3.23 | 3.23 |

Inventory of Tools & Fixtures.—*Continued.*

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|-------------|-----------|--------------------------|---------------|-------------|--------------|
| 152 | | | | | |
| " | 9 | T 1133 Facing | ..... | 3.70 | 33.30 |
| " | 8 | T 1130 " | ..... | 3.93 | 31.44 |
| " | 5 | T 1125 " | ..... | 4.35 | 21.75 |
| " | 6 | T 3130 747 Mach. Reamers | ..... | 64.47 | 386.82 |
| " | 5 | T 3160 1,001 " | ..... | 50.06 | 250.30 |
| " | 8 | T 3166 1/2" End Mills | ..... | 21.06 | 168.48 |
| " | 3 | T 1105 Facing Cutters | ..... | 2.78 | 8.34 |
| " | 2 | T 1101 2nd Facing Bar | ..... | 34.53 | 69.06 |
| " | 7 | T 1279 Radius Cutter | ..... | 6.83 | 47.81 |
| " | 3 | T 2159 Boring Tool | ..... | 6.05 | 18.15 |
| " | 3 | T 2162 Boring Tools | ..... | 6.90 | 20.70 |
| " | 5 | T 3200 Boring Bar Pins | ..... | 15.93 | 79.80 |
| Total | | | | | 5,636.46 |

Sheet #19.

Contract 1498.

Inventory of Tools & Fixtures.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|-----------------------|---------------|-------------|--------------|
| 153 | | | | | |
| 87 | 2 | T 1098 1.982 Cutters | ..... | 4.69 | 9.38 |
| " | 3 | T 1119 Facing Cutters | ..... | 3.58 | 10.74 |
| " | 2 | T 2063 | ..... | 16.46 | 32.92 |

| | | | | |
|----|---|------|------------------------|------|
| 3 | T | 1102 | " | 7.90 |
| " | " | " | " | 4.84 |
| 1 | T | 2044 | " | 1.20 |
| 4 | T | 1080 | " | 5.25 |
| 5 | T | 1043 | " | 2.80 |
| 13 | T | 1041 | " | 5.75 |
| " | " | " | " | 5.62 |
| 3 | T | 1167 | 1 1/4 x 2 Counterbores | 2.64 |
| " | " | " | " | " |
| 2 | T | 2049 | Finish Cutters | " |
| " | " | " | " | " |
| 1 | T | 2048 | Rough | " |

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| | | | | |
|---|---|------|---------------------|-------|
| 7 | T | 1132 | Facing | 3.79 |
| " | " | " | " | 3.45 |
| 7 | T | 1131 | " | 66.17 |
| " | " | " | " | 4.65 |
| 3 | T | 3131 | Bar | 8.25 |
| 6 | T | 1198 | 1 1/8 x 2 C' Bores | 10.70 |
| 4 | T | 1075 | 1.840" Cutters | 11.46 |
| " | " | " | " | 10.39 |
| 3 | T | 3224 | 47/64 Drills | 22.99 |
| 2 | T | 1128 | 7/8" 4 Lipped Drill | 27.55 |
| " | " | " | " | 30.53 |
| 4 | T | 3307 | 3/4" Mach. Reamers | 23.71 |
| " | " | " | " | 61.91 |
| 1 | T | 1177 | 4 Lipped Drill | 18.40 |
| " | " | " | " | 20.30 |
| 6 | T | 2149 | C' Bores | 17.27 |
| " | " | " | " | 12.90 |
| 2 | T | 3158 | 47/64 Bor. Bar | 26.21 |
| " | " | " | " | " |
| 2 | T | 3156 | 63/64 " | " |
| " | " | " | " | " |
| 1 | T | 3155 | Drill Socket | " |
| " | " | " | " | " |
| 1 | T | 3129 | " Holder | " |
| " | " | " | " | " |
| 3 | T | 3232 | Tapper Socket | " |
| " | " | " | " | " |
| 2 | T | 2177 | Shell Reamers | " |
| " | " | " | " | " |
| 3 | T | 3208 | C' Bores | " |
| " | " | " | " | " |
| 2 | T | 1287 | Spot Facers | " |
| " | " | " | " | " |

| |
|--------|
| 26.53 |
| 24.15 |
| 198.51 |
| 27.90 |
| 33.00 |
| 32.10 |
| 22.92 |
| 41.56 |
| 22.99 |
| 165.30 |
| 61.06 |
| 47.42 |
| 61.91 |
| 18.40 |
| 60.90 |
| 34.54 |
| 38.70 |
| 52.42 |

Inventory of Tools & Fixtures.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|------------------------------------|---------------|-------------|--------------|
| 155 | | | | | |
| " | 1 | T 4111 #11 Arbor for End Mill..... | ..... | 18.19 | 18.19 |
| " | 1 | T 1288 3 Lipped Core Drill..... | ..... | 292.96 | 292.96 |
| " | 1 | T 1288 Spot Facers..... | ..... | 18.38 | 18.38 |
| " | 1 | T 3171 63/64 Drill..... | ..... | 39.68 | 39.68 |
| " | 1 | T 2145 1.436 Core Drill..... | ..... | 32.22 | 32.22 |
| " | 2 | T 1200 Reamers ..... | ..... | 9.29 | 18.58 |
| " | 1 | T 3288 Cutter ..... | ..... | 11.67 | 11.67 |
| " | 1 | T 3235 .745 Mach Reamer..... | ..... | 13.35 | 13.35 |
| " | 2 | T 1112 Boring Bar Cutters..... | ..... | 7.88 | 15.76 |
| " | 1 | T 1111 " ..... | ..... | 310.37 | 310.37 |
| " | 3 | T 2084 5.470 Cutters..... | ..... | 14.80 | 44.40 |
| " | 3 | T 2085 1/2" " ..... | ..... | 15.71 | 47.13 |
| " | 1 | T 3198 Fly " ..... | ..... | 90.49 | 90.49 |
| " | 2 | T 3225 4.250 " | 415# | 16.64 | 33.28 |
| " | 1 | Reamer ..... | ..... | 17.06 | 17.06 |
| " | 1 | 1 x 3/4 C' Bore..... | ..... | 14.38 | 14.38 |
| " | 1 | Tool for Piston for 49159-2..... | ..... | 25.00 | 25.00 |
| 88 | 1 | T 3229 Arbor ..... | ..... | 41.80 | 41.80 |
| 156 | | | | | |
| " | 2 | T 3165 Cutter Arbor..... | ..... | 23.99 | 47.98 |
| " | 1 | T 3287 Facing Bar..... | ..... | 50.29 | 50.29 |
| " | 1 | T 3228 Arbor ..... | ..... | 53.17 | 53.17 |
| " | 1 | T 3140 " ..... | ..... | 23.45 | 23.45 |
| " | 1 | T 3167 Boring Bar..... | ..... | 15.92 | 15.92 |

| | | | | | | |
|-------|----|--------|------------------|--------|--------|----------|
| " | 1 | T 3140 | Cutter Arbor | 43.14 | 50.06 | 43.14 |
| " | 1 | T 3141 | " | 50.06 | 31.19 | 405.47 |
| " | 13 | T 1088 | 1.998 Mach. Taps | 31.19 | 16.64 | 33.28 |
| " | 2 | T 3225 | 4.250 Cutters | 16.64 | 109.85 | 109.85 |
| " | 1 | T 3227 | Arbor & Cutter | 109.85 | 28.21 | 253.89 |
| " | 9 | T 3238 | Shell End Mills | 28.21 | 31.51 | 31.51 |
| " | 1 | T 3272 | Arbor | 31.51 | | |
| Total | | | | | | 3,545.85 |

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Sheet #20.

Contract #1498.

Inventory of Tools & Fixtures.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|---------------------------|---------------|-------------|--------------|
| 88 | 4 | T 3193 Facing Bar | ..... | 51.12 | 204.48 |
| " | 1 | T 1101 Spot Facer | ..... | 27.66 | 27.66 |
| " | 2 | T 3321 1.501 Hand Reamers | ..... | 40.47 | 80.94 |
| " | 2 | T 3161 Facing Bar | ..... | 99.92 | 199.84 |
| " | 2 | T 1033 Drill Holder | ..... | 2.06 | 4.12 |
| " | 1 | T 1045 Boring Bar | ..... | 57.61 | 57.61 |
| " | 1 | T 1079 Boring Bar | ..... | 48.80 | 48.80 |
| " | 1 | T 2051 Reamer | ..... | 91.13 | 91.13 |
| " | 1 | T 1269 Boring Bar | ..... | 42.97 | 42.97 |
| " | 1 | T 3323 Arbor | ..... | 64.46 | 64.46 |
| " | 1 | T 2054 Facing Bar | ..... | 37.28 | 37.28 |
| " | 2 | T 3135 Cutters | ..... | 3.00 | 6.00 |
| " | 1 | T 2052 Facing Bar | ..... | 114.44 | 114.44 |

Inventory of Tools & Fixtures.—Continued.

| Case No. | Quantity. | Article. | Gross weight. | Price each. | Total price. |
|----------|-----------|--|---------------|-------------|-----------------|
| 158 | | | | | |
| " | 2 | T 3307 Machine Reamers..... | ..... | 10.39 | 20.78 |
| " | 1 | T 3305 "..... | ..... | 8.77 | 8.77 |
| " | 3 | T 3306 "..... | ..... | 2.36 | 7.08 |
| " | 2 | T 1118 Facing Cutters..... | ..... | 13.32 | 26.64 |
| " | 1 | T 3136 Arbor..... | 560 Lbs. | 8.00 | 8.00 |
| " | 1 | T 2029 Boring Bar..... | ..... | 304.23 | 304.23 |
| " | 1 | T 2072 Oil Groove Tool..... | ..... | 145.88 | 145.88 |
| " | 1 | T 3212 Radius Mill Fixture..... | ..... | 896.33 | 896.33 |
| " | 1 | T 3215 Straddle Mill Fixture..... | ..... | 130.53 | 130.53 |
| " | 1 | T 3271 Yoke Mill Fixture..... | ..... | 1,346.91 | 1,346.91 |
| " | 3 | T 1110 Boring Bar Driver..... | ..... | 38.16 | 114.48 |
| " | 12 | T 3132 Facing Cutters..... | ..... | 6.03 | 72.36 |
| " | 4 | T 3162 " Bars..... | ..... | 5.57 | 22.28 |
| " | 6 | T 3233 Cutters..... | ..... | 10.64 | 63.84 |
| " | 2 | T 1086 Reamers..... | ..... | 34.54 | 69.08 |
| " | 1 | T 3125 Shank Cutter..... | ..... | 11.56 | 11.56 |
| " | 1 | T 2005 Hollow Mill for Trunions on Slides..... | ..... | 268.15 | 268.15 |
| | Total | ..... | ..... | ..... | <u>4,496.63</u> |

Sheet #21.

Contract #1498.

Recapitulation of Tools, Fixtures, and Supplies Shipped March 26,
1920, via Penn. R. R. Car No. L. V. 62888—Seals #479-480.

| | | |
|---------|----|-----------|
| Sheet # | 1 | 1,063.48 |
| | 2 | 1,677.40 |
| | 3 | 931.48 |
| | 4 | 3,145.08 |
| | 5 | 439.31 |
| | 6 | 157.24 |
| | 7 | 865.53 |
| | 8 | 254.55 |
| | 9 | 3,826.28 |
| | 10 | 2,806.61 |
| | 11 | 763.62 |
| | 12 | 145.78 |
| | 13 | 180.91 |
| | 14 | 404.57 |
| | 15 | 216.30 |
| | 16 | 87.35 |
| | 17 | 9,490.31 |
| | 18 | 5,636.46 |
| | 19 | 3,545.85 |
| | 20 | 4,496.63 |
| Total | | 40,154.74 |

Sheet #1.

160

| Quan. | Article. | | Price, each. | Total price. |
|-------|----------|----------------|--------------|--------------|
| 3 | T 1055 | Grey Iron Cast | .30 | |
| 2 | T 1093 | " | .065 | 1.56 |
| 1 | T 1157 | " | .055 | 5.56 |
| 1 | T 1209 | " | .055 | 2.42 |
| 6 | T 2008 D | " | .065 | 30.55 |
| 5 | T 2008 E | " | .065 | 17.88 |
| 1 | G 2045 | " | .055 | 5.67 |
| 1 | T 2081 A | " | .055 | 4.84 |
| 1 | T 2083 | " | .05 | 1.50 |
| 2 | T 2091 | " | .055 | 8.69 |
| 1 | T 2095 | " | .055 | 1.10 |
| 1 | T 2097 | " | .055 | 1.21 |
| 2 | T 2103 A | " | .055 | 3.09 |
| 1 | T 2107 | " | .055 | 2.26 |
| 1 | T 2109 B | " | .055 | .99 |
| 1 | T 2114 A | " | .055 | .72 |

161

| | | | | |
|---|----------|---|------|------|
| 1 | T 2114 B | " | .055 | 1.71 |
| 1 | T 2115 | " | .055 | 2.09 |
| 1 | T 2116 A | " | .055 | .77 |
| 2 | T 2119 | " | .055 | .88 |
| 1 | T 2123 | " | .055 | .55 |
| 1 | T 2125 | " | .055 | .83 |
| 1 | T 4021 | " | .06 | 5.58 |
| 1 | T 4115 | " | .055 | 1.71 |

| | | | | | | | |
|---|--------------------------|---|---|---|----------|-----------|----------|
| 1 | T 4114 | " | " | " | 107 # | .055 " | 5.89 |
| 1 | T 2060 A | " | " | " | 145 # | .055 " | 7.98 |
| 1 | T 1059 | " | " | " | 500 # | .05 " | 25.00 |
| 1 | T 2002 A | " | " | " | 1431 # | .05 " | 71.55 |
| 1 | T 2170 | " | " | " | 123 # | .055 " | 6.77 |
| 2 | G 3053 | " | " | " | 3552 # | .065 " | 230.88 |
| 2 | G 3053 D | " | " | " | 406 # | .065 " | 26.39 |
| 1 | G 3119 B | " | " | " | 174 # | .065 " | 11.31 |
| 1 | G 3146 | " | " | " | 67 # | .058 " | 3.89 |
| 1 | G 3201 | " | " | " | 267 # | .055 " | 14.69 |
| 1 | T 3227 | " | " | " | 282 # | .055 " | 15.51 |
| 2 | T 3293 | " | " | " | 1350 # | .065 " | 87.75 |
| 1 | T 4076 | " | " | " | 46 # | .055 " | 2.53 |
| 1 | T 4179 | " | " | " | 31 # | .055 " | 1.71 |
| 1 | 10 x 10 C. I. Angle. | " | " | " | 75 # | .06 " | 4.50 |
| 5 | 12 x 12 " | " | " | " | 582 # | .06 " | 34.92 |
| 9 | Steel Drums Cutrite Oil. | " | " | " | 455 Gal. | .79 gal. | 359.45 |
| 9 | Steel Drums | " | " | " | " | 10.50 ea. | 94.50 |
| 2 | 4' x 8' Surface Plates | " | " | " | " | 311.94 | 623.88 |
| 4 | 30 x 66 " | " | " | " | " | 281.15 | 1,124.60 |
| 1 | 4' x 7' " | " | " | " | " | 379.69 | 379.69 |
| 1 | 36" x 48" " | " | " | " | " | 246.88 | 246.88 |
| 1 | 34" x 67" " | " | " | " | " | 285.34 | 285.34 |
| 1 | 18" x 24" " | " | " | " | " | 55.00 | 55.00 |
| 5 | 16" x 22" " | " | " | " | " | 53.00 | 265.00 |
| 2 | 8" x 12" " | " | " | " | " | 12.50 | 25.00 |
| 1 | 8" x 22" " | " | " | " | " | 19.00 | 19.00 |

Sheet #1.—Continued.

| Quan. | Article. | Ft. | Lb. | Price, each. | Total price. |
|--------|-------------------------------------|------------|---------|--------------|--------------|
| 1 | Cast Iron Stand for 34 x 67" Plate. | | | 63.00 | 63.00 |
| 2 | 28 x 36" Angle Plates. | | | 138.41 | 276.82 |
| | Total | | | | 4,472.49 |
| 163 | | | | | |
| 1/4" | Round Machine Steel | 60 | 10 | 4.60 cwt. | .46 |
| 5/16" | " | 178 | 57 | 4.465 " | 2.55 |
| 3/8" | " | 154' 8" | 56 1/2 | 4.365 " | 2.47 |
| 1/2" | " | 93' 10" | 63 | 4.25 " | 2.68 |
| 9/16 | " | 4' 4" | 3 3/4 | 4.25 " | .16 |
| 3/4" | " | 5' 11" | 3 3/4 | 4.05 " | .15 |
| 7/8" | " | 13' 7 1/2" | 27 | 4.20 " | 1.13 |
| 1" | " | 14' 7" | 39 | 4.10 " | 1.60 |
| 1 1/8" | " | 22' 6" | 77 | 4.10 " | 3.16 |
| 1 1/4" | " | 49' 2" | 207 | 4.10 " | 8.49 |
| 1 3/8" | " | 21' 10" | 112 | 4.10 " | 4.59 |
| 2 1/2" | " | 12' 1" | 204 1/2 | 4.10 " | 8.38 |
| 2 3/8" | " | 4' 6" | 82 1/2 | 4.10 " | 3.38 |
| 1 7/8" | " | 3' 8" | 35 1/2 | 4.10 " | 1.46 |
| 5" | " | 13' | 942-670 | 4.55 " | 30.49 |
| | | | 272 | 10.00 " | 27.20 |
| 164 | | | | | |
| 5 1/2" | | 10' 8" | 931 1/2 | 10.00 " | 93.15 |

Sheet #1.—Continued.

| Article. | Ft. | Lib. | Price, each. | Total price. |
|------------------------------------|---------|----------|--------------|--------------|
| 1½ x 5 | 8' 1" | 205½-127 | 4.30 | 5.46 |
| 5/8 x 2¾ | 11' 5½" | 78½ | 4.15 | 3.26 |
| 1/16 x 2 | 17' 3" | 67 | 4.10 | 2.75 |
| 1/8 x 1½ | 5' 7" | 9 | 5.05 | .45 |
| 7/8 x 1¼ | 8' 6" | 4 | 4.10 | .16 |
| | | 30 | 4.10 | 1.23 |
| 166 | | | | |
| (Note: Machine Steel Painted Pink) | | | | |
| 5/8 x 5 | 1' 7" | 17½ | 13.00 | 2.28 |
| 5/8 x 4¾ | 3' 8" | 37 | 11.02 | 4.08 |
| 3/8 x 3 | 13' | 50 | 8.96 | 4.48 |
| 3/8 x 3½ | 8' 2" | 37½ | 11.00 | 4.13 |
| 1/4 x 3½ | 19' | 56 | 11.20 | 6.27 |
| 1/4 x 2½ | 11' 1" | 23½ | 8.80 | 2.07 |
| | | | | 401.70 |

Inventory of Steel and Oil.

| | Article. | Ft. | Lb. | Price, each. | Total price. |
|--------|---------------------------|---------|-------|--------------|--------------|
| 1½ x 3 | Flat Cold Roll Steel..... | 11' 9" | 60-57 | @ 8.80 Cwt. | 5.11 |
| ¾ x 2 | " " " | 12' 8" | 3 | @ 8.80 " | .26 |
| ¼ x 1¾ | " " " | 1' 3½" | 60-57 | @ 8.96 Cwt. | 5.11 |
| ⅝ x 1½ | " " " | 1' 4" | 2 | @ 9.00 " | .18 |
| 1⅝ | Square " " | 20' 2" | 3½ | 9.40 " | .33 |
| 1½ | " " " | 18' 7" | 183 | 7.84 " | 14.35 |
| 7/16 | " " " | 20' 10" | 129 | 7.84 " | 10.11 |
| ½ x ¾ | Flat " " | 5' 11" | 17 | 9.52 " | 1.62 |
| ⅜ x ¾ | " " " | 4' 6" | 8 | 8.96 " | .72 |
| ¾ | Square " " | 26' 7½" | 4 | 11.20 " | .45 |
| 7/8 | " " " | 11' 7" | 51 | 8.68 " | 4.43 |
| 1 1/16 | " " " | 8' 10" | 30 | 7.70 " | 2.31 |
| 1¼ | " " " | 6' 11" | 36½ | 7.84 " | 2.86 |
| ⅝ x 1 | Flat " " | 11' 3" | 36 | 7.84 " | 2.82 |
| | | | 26-22 | @ 8.96 " | 1.97 |
| | | | 4 | @ 8.80 " | .35 |
| ¼ x ¾ | " " " | 2' 6½" | 1½ | 14.20 " | .21 |
| ½ | Square " " | 3' 11" | 3½ | 9.52 " | .33 |
| 9/16 | " " " | 10' 4½" | 11 | 9.52 " | 1.05 |
| ⅜ | " " " | 55' 10" | 26½ | 9.90 " | 2.62 |
| 168 | | | | | |
| 5/16 | " " " | 42' 7" | 14 | 11.00 " | 1.54 |

Inventory of Steel and Oil.—Continued.

| Article. | Ft. | Lb. | Price, each. | Total price. |
|----------|------------|-----------|--------------|--------------|
| 1/4 | 13' 7" | 3 | 11.20 | .34 |
| 1 1/2 | 9' 2" | 61 | 7.70 | 4.70 |
| 1 5/16 | 5' 7" | 28 | 7.70 | 2.16 |
| 1 1/8 | 12' 5" | 46 | 7.70 | 3.54 |
| 3/4 | 12' 8 1/2" | 21 | 8.52 | 1.79 |
| 7/8 | 12' 9" | 28 1/2 | 8.35 | 2.38 |
| 15/16 | 16' 11" | 43 | 7.70 | 3.31 |
| 3/8 | 4' 9" | 1 1/2 | 9.90 | .15 |
| 1 1/16 | | 104 | 6.00 | 6.24 |
| 1 1/8 | | 54 | 6.00 | 3.24 |
| 1 3/16 | 59' 9" | 212 1/2 | 5.50 | 11.69 |
| 1 1/4 | 20' | 82 | 5.94 | 4.87 |
| 7/8 | 21' 11" | 45 | 6.16 | 2.77 |
| 15/16 | 37' 10" | 89 | 5.94 | 5.29 |
| 13/16 | | 63-61 1/2 | 8.40 | .55 |
| 3/4 | | 56 1/2 | 6.16 | 3.48 |
| 169 | 13' 10" | 26-14 1/2 | 6.16 | .89 |
| 9/16 | | 11 1/2 | 7.28 | .84 |
| 1 1/2 | 41' 4" | 12 | 6.72 | .81 |
| 7/16 | 48' | 22 1/2 | 5.18 | 1.17 |
| 3/16 | 139' 2" | 24 1/2 | 4.844 | 1.19 |
| | | 13-1 | 7.50 | .08 |
| | | 7 | 8.25 | .58 |
| | | | | .12 |

| | | | | | | | | |
|---------|---|---|---|------------|---------|-------|---|--------|
| 1/8 | " | " | " | 132' | 6 | 9.50 | " | 57 |
| 1 1/2 | " | " | " | 27' 6" | 166 1/2 | 6.78 | " | 11.29 |
| 1 7/16 | " | " | " | 46' 4" | 236 | 5.50 | " | 14.08 |
| 1 3/8 | " | " | " | 56' 2 1/2" | 279 | 6.05 | " | 16.88 |
| 1 5/16 | " | " | " | 11' 9" | 54 | 6.00 | " | 3.24 |
| 1 5/8 | " | " | " | 50' 2" | 352 1/2 | 6.00 | " | 21.15 |
| 1 9/16 | " | " | " | 78' 3" | 512 | 5.775 | " | 29.57 |
| 1 3/4 | " | " | " | 78' 3" | 633 | 6.25 | " | 39.56 |
| 1 11/16 | " | " | " | 38' | 285 | 5.775 | " | 16.46 |
| 1 13/16 | " | " | " | 22' 8" | 200 | 5.775 | " | 11.55 |
| 2" | " | " | " | 36' | 386 | 5.13 | " | 19.80 |
| 170 | | | | | | | | |
| 2 1/8 | " | " | " | 39' 4" | 469-288 | 5.50 | " | 15.85 |
| 2 1/16 | " | " | " | 12' 6" | 181 | 5.60 | " | 10.14 |
| | | | | | 142 | 5.50 | " | 7.81 |
| | | | | | | | | 336.98 |

Sheet #3.

Contract #1498.

Inventory of Steel and Oil.

| Article. | Ft. | Lb. | Price, each. | Total price. |
|-----------------------------------|--------|--------|--------------|--------------|
| 2 3/16 Round Cold Roll Steel..... | 12' 4" | 225 | 5.50 Cwt. | 12.38 |
| 2 5/16 " " "..... | 13' 9" | 195 | 5.50 " | 10.69 |
| 2 1/4 " " "..... | | 729-33 | 5.50 @ | 1.82 |
| | | 696 | 5.60 @ | 38.98 |

Inventory of Steel and Oil.—Continued.

| | Article. | Ft. | Llb. | Price, each. | Total price. |
|---------|----------|---------|-----------|--------------|--------------|
| 171 | " | " | " | " | " |
| 2 3/8 | " | 33' 8" | 508 | 5.60 | 28.45 |
| 4 3/4 | " | 20' 5" | 1231-1096 | 7.28 | 79.79 |
| | " | " | 135 | 7.15 | 9.65 |
| 2 1/2 | " | 31' | 520 | 5.60 | 29.12 |
| 2 7/16 | " | 22' | 365 | 5.50 | 20.08 |
| 4 1/16 | " | 1' 6" | 66 | 6.00 | 3.96 |
| 3 1/2 | " | 4' 8" | 152 1/2 | 5.75 | 8.77 |
| 3 5/16 | " | 5' | 145 1/2 | 5.50 | 8.00 |
| 3 | " | 19' 11" | 477-1 | 5.75 | .06 |
| | " | " | 476 | 6.00 | 28.56 |
| 2 5/8 | " | 16' 8" | 306 | 5.60 | 17.14 |
| 2 3/4 | " | 20' | 404 | 5.60 | 22.62 |
| 1 15/16 | " | 3' 8" | 37 1/2 | 6.5625 | 2.46 |
| 3 1/4 | " | 20" | 48 | 4.175 | 2.00 |
| 2 7/8 | " | 89' | 1,945 | 5.50 | 106.98 |
| 2 15/16 | " | " | 4,337 | 5.00 | 216.85 |

(NOTE: Cold Rolled Steel painted yellow.)

| | | | | | |
|-----------|-----------------------|--------|---------|-------|--------|
| 6" | Round Tool Steel..... | 7' 5" | 753 1/2 | 22.50 | 169.54 |
| 5" | " "..... | 3' 8" | 260 1/2 | 26.00 | 67.73 |
| 172 | " "..... | " | " | " | " |
| 4" | " "..... | 7' 11" | 335 | 25.70 | 86.10 |
| 1 x 1 1/2 | Flat " "..... | 7' 8" | 43 1/2 | 25.00 | 10.88 |

| Size | Weight per foot | Length in feet | Weight in pounds | Notes |
|-------------|-----------------|-----------------|------------------|-------|
| 1 1/2 | 14.16 | 60 | 23.60 | " |
| 1 3/8 | 15.12 | 63 | 24.00 | " |
| 3/8 x 1 1/2 | 3.63 | 14 1/2 | 25.00 | " |
| 1/4 x 2 | 4.34 | 17 | 25.50 | " |
| 1/4 x 2 | 3.81 | 15 1/4 | 25.00 | " |
| 1/4 x 1 1/2 | 1.72 | 6 1/2 | 26.50 | " |
| 5/8 x 1 1/2 | 6.66 | 27 1/2 | 24.20 | " |
| 1 1/2 | 1.47 | 6 | 24.50 | " |
| 5/8 | 3.89 | 15 1/4 | 25.50 | " |
| 1 1/2 | 2.68 | 10 1/2 | 25.50 | " |
| 3/8 | .38 | 1 1/2 | 25.60 | " |
| 3/4 | 2.37 | 5 1/2 | 43.00 | " |
| 7/8 | 2.28 | 9 1/2 | 24.00 | " |
| 1 1/4 | 7.01 | 27 1/2 | 25.50 | " |
| 173 | | | | |
| 1 1/4 | 3.00 | 12 | 25.00 | " |
| 3/8 x 3/4 | .63 | 2 1/2 | 25.00 | " |
| 3 1/2 | 688.80 | 337 1/2-336 1/2 | @ 2.05 | Llb. |
| 2 1/4 | 3.45 | 1 1/2 | @ 2.30 | " |
| 2 1/2 | 281.19 | 137 1/2 | 2.045 | " |
| 1 13/16 | 191.11 | 93 1/2 | 2.044 | " |
| 1 1/4 | 249.72 | 123 1/2 | 2.022 | " |
| 1 3/8 | 42.63 | 21 | 2.03 | " |
| | 87.37 | 43 1/4 | 2.02 | " |
| | 2,615.72 | | | |

(NOTE.—Tool Steel painted green and white.)

(NOTE.—Tool Steel painted green and white.)

| | |
|---------|-----------------------------|
| 3 1/2 | Round High Speed Steel..... |
| 2 1/4 | " " |
| 2 1/2 | " " |
| 1 13/16 | " " |
| 1 1/4 | " " |
| 1 3/8 | " " |

174

Sheet #4.

Contract #1498.

Inventory of Steel and Oil.

| | Article. | Ft. | Lb. | Price, each. | Total price. |
|--------------|-------------------------|------------|-------------|--------------|--------------|
| 1 9/16" | Round High Speed Steel. | 9' 5" | 70 | 2.03 | 142.10 |
| 1 1/8 | " | 11' 2" | 42 | 2.03 | 85.26 |
| 1 | " | 6' 2 1/2" | 18 | 2.03 | 36.54 |
| 1/4 | " | 8' 3" | 1 1/2 | 2.115 | 3.17 |
| 3/8 | " | 20' 1" | 8 1/2 | 2.065 | 17.55 |
| 7/32 | " | 11' 6" | 1 3/4 | 2.115 | 3.70 |
| 1/4 | Square | 12' | 2 1/2 | 2.145 | 5.36 |
| 7/16 | " | 8' 3" | 6 1/4 | 2.065 | 12.91 |
| 3/4 x 1 1/2 | Flat | 20' 6 1/2" | 86 1/2 | 2.02 | 174.73 |
| 1 x 1 1/4 | " | 37' 6 1/2" | 175-95 | (@) 2.03 | 192.85 |
| 1 3/4 x 2 | " | 20' 1" | 80 | (@) 2.029 | 162.32 |
| | | | 270-127 | (@) 2.028 | 257.56 |
| 175 | | | | | |
| 5/8 x 1 1/4 | " | 17' 11" | 143 | (@) 2.031 | 290.43 |
| 7/8 x 1 3/4 | " | 8' 3 1/2" | 53 1/2 | 2.02 | 108.07 |
| 7/16 x 2 | " | 58' 11" | 48 | 2.025 | 97.20 |
| | | | 190 1/2-138 | (@) 2.051 | 283.04 |
| | | | 35 | (@) 2.025 | 70.88 |
| 7/16 x 1 1/2 | " | 48' 9 1/2" | 17 1/2 | (@) 2.395 | 41.91 |
| | | | 123 1/2-111 | (@) 2.049 | 227.44 |
| | | | 1 1/2 | (@) 2.049 | 3.07 |

| | | | | | | | | | | |
|------------------|------------------------|---|---|---|-------------|----------|---|-------|---|--------|
| 9/32 x 2 | " | " | " | " | 9' 5" | 30 1/4 | @ | 2.05 | " | 62.01 |
| 5/16 x 2 | " | " | " | " | 4' 5" | 20 | | 2.05 | " | 41.00 |
| 3/4 x 4 | " | " | " | " | 7' | 11 | | 2.06 | " | 22.66 |
| 9/16 x 1 1/8 | " | " | " | " | 28' 3" | 66 | | 2.17 | " | 169.26 |
| 1 5/16 x 1 1/2 | " | " | " | " | 19' 11" | 152 | | 2.04 | " | 134.64 |
| 5/8 x 1 | " | " | " | " | 15' 11" | 37 | | 2.026 | " | 307.95 |
| 1 1/2 x 1 | " | " | " | " | 20' 10" | 39 | | 2.03 | " | 75.11 |
| 7/16 x 1 | " | " | " | " | 21' 11 1/2" | 33 1/4 | | 2.045 | " | 79.76 |
| 176 | | | | | | | | 2.05 | " | 68.16 |
| 5/16 x 1 | " | " | " | " | 3' 11" | 4 1/2 | | 2.056 | " | 9.25 |
| 1/8 x 7/8 x 3/32 | " | " | " | " | 55' 6" | 19 | | 2.02 | " | 38.38 |
| 1 1/2 x 2 1/8 | " | " | " | " | 9' 3" | 111 | | 2.048 | " | 227.33 |
| 1 1/2 x 2 1/2 | " | " | " | " | 20' 5" | 264 | | 2.05 | " | 541.20 |
| 1 1/4 x 1 1/2 | " | " | " | " | 10' 7" | 79 | | 2.026 | " | 160.05 |
| 5/16 x 1 1/4 | " | " | " | " | 13' 2 1/2" | 19 1/4-6 | @ | 2.06 | " | 12.36 |
| | | | | | | 13 1/4 | @ | 2.051 | " | 27.18 |
| 3 5/8" | Round High Speed Steel | | | | 13' 6" | 44 | | 2.065 | " | 90.86 |
| 5/16 | Square | " | " | " | 1' 6" | 1 1/2 | | 2.33 | " | 1.17 |
| 3/8 | " | " | " | " | 1' | 1 1/2 | | 2.305 | " | 1.15 |
| 1 3/8 | " | " | " | " | 1' | 8 | | 2.026 | " | 16.21 |
| 5/8 x 1 1/2 | " | " | " | " | 9 1/4" | 21 1/2 | | 2.02 | " | 5.05 |
| 5/8 x 2 | " | " | " | " | 1' | 4 3/4 | | 2.027 | " | 9.63 |
| 5/8 x 4 | " | " | " | " | 8' | 6 1/4 | | 2.04 | " | 12.75 |
| 1 x 2 | " | " | " | " | 2' 4" | 18 | | 2.027 | " | 36.49 |
| 1 1/4 x 2 | " | " | " | " | 11 1/2" | 9 | | 2.05 | " | 18.45 |
| 1 1/2 x 2 | " | " | " | " | 1' 10" | 21 | | 2.04 | " | 42.84 |
| 1 9/16 x 2 | " | " | " | " | 8 1/2" | 8 1/2 | | 2.02 | " | 17.17 |

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Inventory of Steel and Oil.—*Continued.*

| Article. | Ft. | Lb. | Price, each. | Total price. |
|---|-------|----------|--------------|----------------|
| 3½ Round Nickel Steel..... | 8' 4" | 283 | .135 " | 38.21 |
| (NOTE.—High Speed Steel Painted Red and White.) | | | | |
| 7 bls. Quenching Oil..... | | 350 Gal. | .59 Gal. | 206.50 |
| | | | | <hr/> 4,747.58 |

Contract #1498 R. M. #3.
Via Penn. R. R.
Car A. T. S. F. #44405.
Seals 483-84.

Recapitulation of Steel and Oil Shipped to Supply Officer, Navy Yard, Washington, D. C.

| | |
|---------------|------------------|
| Sheet #1..... | \$401.70 |
| " #2..... | 336.98 |
| " #3..... | 2,615.72 |
| " #4..... | 4,747.58 |
| Total | <hr/> \$8,101.98 |

List of Machinery & Equipment as Shown in Claim #1498.

250-3" A. A. Gun Mounts #2.

| Inv. | Date recd. | Vendor. | Description. | Invoice price. |
|-----------|------------|---------------------------|----------------------------------|----------------|
| 5/31/18. | 6/ 7 | Homer Strong. | G. & L. Horiz. Boring Mill. | 5,300.00 |
| 7/11/18. | 7/22 | " | " | 5,950.00 |
| 9/24/18. | 9/25 | " | " | 5,600.00 |
| 5/24/18. | 6/11 | The King Machine Tool Co. | 62" King Vert. Boring Mill. | 8,200.00 |
| 7/26/18. | 8/ 1 | Iznesshoff & Co. | Gould Eberhard 36" Gear Hobber. | 4,300.00 |
| 7/20/18. | 7/30 | Syracuse Supply Co. | American Plain Rad. Drill. | 3,130.00 |
| 7/ 6/18. | 7/15 | " | Amer. Pl. full Univ. Rad. Drill. | 4,350.00 |
| 7/ 6/18. | 7/18 | Brown & Sharpe Mfg. Co. | B. & S. #4 B Pl. Mill Machine. | 3,230.00 |
| 10/ 1/18. | 10/19 | " of New York Inc. | " " #5 " | 3,940.00 |
| 10/11/18. | 10/16 | Manning Maxwell & Moore. | Putnam Gap Lathe 22 x 46 x 8. | 1,150.00 |
| 10/15/18. | 10/16 | " | " " " | 1,150.00 |
| 7/14/18. | 24/18 | A. R. Williams Mach. Co. | Bridgeford Lathe. | 2,955.00 |
| 1/ 5/18. | 1/25 | Brown & Sharpe Mfg. Co. | #3 B. & S. Vert. Miller. | 2,830.00 |

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| | | | | |
|----------|------|---------------------------------|---------------------------------|----------|
| 7/24/18. | 8/22 | Canadian Fairbanks Morse Co. | " " " | 2,830.00 |
| 7/11/18. | 7/23 | A. R. Williams Mach. Supply Co. | Blount Speed Lathe. | 85.00 |
| 7/31/18. | 9/20 | Canadian Fairbanks (card). | 2 1/2 B Milwaukee Vert. Miller. | 2,590.00 |
| 8/26/18. | 9/20 | Syracuse Supply Co. | " Plain " | 2,700.00 |
| 7/20/18. | 8/ 6 | Henry Prentiss & Co. Inc. | #4 Cincinnati Miller. | 3,810.00 |

List of Machinery & Equipment.—Continued.

| Inv. | Date recd. | Vendor. | Description. | Invoice price. |
|------------------------------------|---------------|-------------------------------|------------------------------------|-------------------|
| 8/ 5/18. | 8/20 | " " " | 36 x 28 x 8 Cincinnati Planer..... | 4,361.00 |
| 8/ 5/18. | 8/20 | " " " | " " " " | 4,361.00 |
| 6/25/18. | 7/15 | Syracuse Supply Co..... | 25" Weigel Drill Press..... | 630.00 |
| 10/ 4/18. | 10/ 9 | The Kent Owen Machine Co..... | #1 Toledo R. B. H. S. Miller..... | 330.00 |
| 10/ 9/18. | 10/19 | " " " | #1 " " " " | 330.00 |
| 5/27/18. | 6/ 8 | Henry Prentiss Co..... | 24" G. & E. Shaper..... | 1,500.00 |
| 5/27/18. | 6/18 | " " " | " " " " | 1,500.00 |
| 9/10/18. | 10/ 1 | McCarthy Brothers & Ford..... | Electric Crane..... | 3,150.00 |
| 10/ 8/18. | 10/24 | Niles Bement-Pond Co..... | Steam Hammer..... | 1,000.00 |
| Total Cost..... | | | | \$81,262.00 |
| Total amount realized by sale..... | | | | 57,073.25 |
| Loss | | | | \$24,183.75 |

III. *General Traverse.*

No demurrer, plea, answer, counterclaim, setoff, claim of damages, demand, or defense in the premises, having been entered on the part of the defendant, a general traverse is entered as provided by Rule 34.

IV. *Argument and Submission of Case.*

On May 24, 1922, this case was argued and submitted on merits by Mr. Lyman M. Bass, for plaintiff, and by Mr. Alexander H. McCormick, for defendant.

V. *Findings of Fact, Conclusion of Law, and Opinion of the Court by Downey, J.*

Entered June 26, 1922.

This case having been heard by the Court of Claims, the court, upon the evidence, makes the following

Findings of Fact.

I.

In or about the month of October, 1917, the Russell Motor Car Company, the plaintiff, became and ever since has been a corporation duly organized, created, and existing under and by virtue of the laws of the State of Delaware, and on or about November 27th, 1917, duly complied with the laws of the State of New York so as to properly authorize it to carry on business in the said State.

II.

In the month of May, 1918, the plaintiff entered into a written contract dated May 14, 1918, with the United States, represented by F. D. Roosevelt, Acting Secretary of the Navy, whereby it undertook to make and deliver 250 3" antiaircraft gun mounts Mark "XI, Modification 2" complete with sights (except telescopes) Mark "XVI, Modification 1" at the agreed price of \$7,860 each. Delivery of the mounts was required under the said contract within the following stipulated periods:

10 mounts on or before October 31, 1918, and additional mounts as follows:

15 before November 30, 1918.

20 before December 31, 1918.

25 before January 31, 1919.

60 before February 28, 1919.

60 before March 31, 1919.

60 before April 30, 1919.

Said contract so entered into was given department No. 1498, and was made after formal tender submitted in competition with other bidders. A full and true copy of said contract, together with the specifications therein referred to, are set forth in and annexed to the amended petition in this proceeding entitled "Exhibit A," and made a part hereof by reference.

The mounts and sights provided for in said contract were intended for use on and were a part of the equipment of vessels of the Navy.

III.

In the month of November, 1917, the plaintiff herein had entered into a contract dated November 3d, 1917, with the United States Government, represented by F. D. Roosevelt, Acting Secretary of the Navy, whereby it undertook to make and deliver 400 3" antiaircraft gun mounts, complete with sights except telescopes, at a price of \$88.40 each, the contract having department No. 949, together with the specifications attached thereto.

The plaintiff was required under this said last-mentioned contract to deliver the mounts required thereunder, as follows:

15 mounts on or before May 15, 1918, and additional mounts as follows:

- 25 before June 15, 1918.
- 40 before July 15, 1918.
- 50 before August 15, 1918.
- 50 before September 15, 1918.
- 50 before October 15, 1918.
- 50 before November 15, 1918.
- 60 before December 15, 1918.
- 60 before January 15, 1919.

IV.

The kind, character, and quality of the aircraft gun mounts and sights were the same under each of the above-mentioned contracts designated as Nos. 949 and 1498, respectively, the only difference being in the terms or specifications in said two contracts being those relating to the price of the gun mounts and sights to be delivered thereunder, as well as the quantity of gun mounts and sights to be manufactured and delivered and the delivery dates thereof, which said items of difference are set forth above in findings of fact Nos. II and III.

V.

Prior to the making of either of the above contracts there was in existence a Canadian corporation known as the Russell Motor Car Company (Ltd.), which, during 1915, 1916, and 1917, had become extensively engaged in the manufacture of munitions for the British Government. It employed about 6,000 men, was officered by an experienced and employed in responsible positions men of ability and skill, and had built up a highly efficient organization.

Officers of the United States, seeking for a suitable concern to undertake the manufacture of further gun mounts, conferred with the president of a concern then engaged in that line of work for the Government and he recommended the Canadian company referred to, and it was invited to submit a bid which it did. Its bid was acceptable, but the fact that it was a Canadian corporation led to some discussion resulting in the conclusion by the bidder to incorporate a company in the United States and erect a plant for this work. The plaintiff company was thereupon incorporated under the laws of the State of Delaware with a capital stock of \$2,500,000.00, all of which was paid in and a large part of which was subscribed by the Canadian corporation.

VI.

The plaintiff corporation, in the fall of 1917, after the making of said contract No. 949, acquired and purchased a large plant in the city of Buffalo, N. Y., and immediately provided the nucleus of the organization, manufacturing, purchasing, executive, accounting and cost keeping, made up of men who had been trained in the manufacture of munitions and who, for the most part, had carried out the munition manufacturing program for the said above-described Russell Motor Car Company (Ltd.) of Canada.

VII.

The gun mount and sight is an intricate piece of ordnance weighing approximately six thousand pounds and requires the handling of large pieces of material, and at the same time involves the greatest precision, particularly in the elevation of the gun. The variation of a thousandth of an inch in the measured distance of the piece will throw out the result of the gun fire owing to the length of travel of the projectile. Operators of great mechanical skill were required.

VIII.

The time from November of 1917 to March of 1918 was occupied in the work of installing machinery, equipping the plant, and designing and manufacturing the jigs, tools, and fixtures which were necessary for the accurate production of the gun mounts and sights involved.

About March of 1918 actual work on the material for these gun mounts and sights required under the first contract was begun, the Navy maintaining inspectors in the plant and keeping in constant touch with the progress of the work and the quality and accuracy of the workmanship.

After the making of said contract No. 1498, plaintiff corporation secured additional premises, machinery, tools, ordered extra material, and proceeded and did shop work as well as making contracts for material with subcontractors for castings, forgings, and steel part to carry out said contract.

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IX.

On September 19, 1918, the plaintiff wrote the Navy Department as follows:

"Sept. 19, 1918.

"Navy Dept., Bureau of Ordnance,
Washington, D. C.

"Attention Commander Richmuth.

"Re Contract 949 for 400 3" Antiaircraft Gun Mounts,
and " 1498 " 250 3" " " " "

"DEAR SIR:

"We propose to make deliveries of gun mounts as follows:

| | 1918. | Shipped. | 1919. | Shipped. |
|-----------------|-------|----------|----------------|----------|
| June | | 5 | January | |
| July | | 20 | February | |
| August | | 40 | March | |
| September | | 50 | April | |
| October | | 60 | May | |
| November | | 60 | | |
| December | | 75 | | |

"2. We would respectfully ask your permission to allow us to app all shipments on mounts on the first contract until same is completed, and then follow with shipments on the second contract. This will greatly simplify the handling of all records and manufacturing of parts in the factory. You will note from deliveries given in the first paragraph that in the month of February the first fifty mounts would complete contract 949 and the balance of 60 mounts be delivered in February and the deliveries in the months of March, April, and May would complete the second contract #1498 of 250 mounts.

"3. Extension of contract. We have been seriously delayed supplying gun mounts in accordance with deliveries outlined in our contracts due to conditions beyond our control, and believe that in connection with contract #949 specifying 400 3" antiaircraft gun mounts that we are entitled to an extension of 90 days.

"In regard to our second contract #1498 for 250 3" antiaircraft gun mounts, we believe we are entitled to some extension due to difficulties in securing material, but at this time are not prepared to give any idea as to the amount of extension that should be allowed.

"We are in the meantime proceeding to do everything possible to hurry this work along, and at the proper time will be pleased to discuss with you the matter of extension."

"Will you kindly let us have the desired information as soon as possible?"

"Yours very truly,

"RUSSELL MOTOR CAR CO., INC.
"C. R. BURT, General Manager."

185 On October 11, 1918, the claimant wrote Admiral Ralph Earle, Chief of the Bureau of Ordnance of the Navy Department as follows:

"October 11, 1918.

"Admiral Ralph Earle,
"Navy Dept., Bureau of Ord.,
"Washington, D. C.

"Re Contr. 949-400 3" A. A. Mounts; Contr. 1498-250 3" A. A. Mounts.

"DEAR SIR:

"Your letter of September 25th received and note that you grant our request relative to shipping all of the gun mounts on the 1st contract 949 until the order is completed and follow with shipments applying on the second contract.

"We thank you for granting us this concession, which is entirely satisfactory.

"Very truly, yours,

"RUSSELL MOTOR CAR CO., (INC.).
"C. R. BURT,
"Gen. Mgr."

On September 25, 1918, the Navy Department Bureau of Ordnance, by Admiral Ralph Earle, Chief of said Bureau of Ordnance, wrote the plaintiff as follows:

"Navy Department,

"Bureau of Ordnance,

"Washington, D. C., Sept. 25, 1918.

"33901/373 (M2-5) O.

"EA.

"Subject: Contr. 949 for 400—3" A. A. Mounts and

" 1498 " 250—" " "

"Reference: (a) Company's letter of Sept. 19, 1918.

"SIRS:

"Receipt is acknowledged of the company's letter of Sept. 19, containing in the first paragraph proposed schedule of deliveries of mounts on the above contracts.

"The company's request for permission to apply all shipments of mounts on the first contract, No. 949, until same is completed, is approved.

"With reference to the company's remark concerning extension of time on contract No. 949; in order that proper consideration may be made to such claims at the expiration of the contract, it is suggested that your company forward the bureau promptly written notification of specific instances where delays beyond your control

have occurred in accordance with the stipulation mentioned in the contract.

"Very truly, yours,

"RALPH EARLE.

"Russell Motor Car Co.

"Via: Naval inspec. of ordnance, Homestead Steel Works, Munhall, Pa."

The plaintiff company manufactured and was able to deliver to the United States in the month of October, 1918, ten gun mounts under contract 1498 and manufactured and was able to deliver under said contract fifteen gun mounts in the month of November, 1918,

and would have made such deliveries on said contract but for 186 the consent of the United States to changed deliveries as set out in the above correspondence and to application of said ten and fifteen gun mounts on contract 949. Relying upon the consent of the United States to said amended schedule of deliveries said ten and fifteen gun mounts so manufactured in October and November, respectively, with all other mounts manufactured during those months, were delivered to the United States to apply on said contract 949.

Contract 949 was amended so as to provide for 260 mounts with sights and 140 without sights, all of which were made and delivered. They complied with contract requirements and were accepted and paid for in full, and by reason of extension of time granted there were no deductions for delay.

Deliveries under this contract were completed in June, 1919.

X.

On November 18, 1918, Admiral Ralph Earle, acting for the Navy Department, wrote the plaintiff as follows:

"Navy Department,

"Bureau of Ordnance,

"Washington, D. C., Nov. 18, 1918.

"Subject: Contracts Nos. 949 and 1498 for 650 3" A A mounts, Mark XI, Mod. 2.

"GENTLEMEN:

"In view of present conditions the bureau desires that the manufacture of gun mounts covered by the above contracts be gradually decreased, the production of the company's peace-time products being resumed as soon as possible, so that a minimum of economic disturbance will be felt during the transition.

"To this end the company is urged to make immediate arrangements for the reduction and eventual stoppage of production of materials under the above contracts, and to substitute, therefore, the company's usual lines of commercial products. Whenever it becomes necessary to reduce the working force of the company, because

of post bellum retrenchments, employees should be given one week's notice prior to discharge.

"The rapidity with which the manufacture of commercial articles can be entered into depends, to a considerable extent, upon the company's ability to procure the necessary materials. In this connection attention is invited to the fact that the War Industries Board is available for assistance in obtaining raw materials, and that, in addition, the bureau will be glad to assist the company whenever it can do so.

"In reducing the manufacture of mounts, the company's subcontracts for materials should be adjusted as quickly as possible in order that the raw materials which would have been required may be made available for the manufacture of commercial products. In developing plans for the curtailment and stoppage of manufacture, it is desired that the smallest amount of partly machined and raw materials remain at the time when the manufacture of mounts finally ceases. Cancellation of materials from subcontracts should be made with this end in view. The bureau realizes that, when work under the above

contract stops, there will be, of necessity, a quantity of partly
187 finished parts in process in all stages of completion. Disposition of such material will be covered later by instructions from the bureau.

"The bureau desires that the company keep it informed of the action taken in accordance with this letter, and also that it should initiate preparations for cancellation along the lines indicated herein.

"Very truly yours,

"RALPH EARLE.

"Russell Motor Car Co.,

"93 Dewey Ave., Buffalo, N. Y."

On November 23, 1918, T. A. Kearney, acting for the Bureau of Ordnance, wrote plaintiff as follows:

"Navy Department,

"Bureau of Ordnance,

"Washington, D. C., Nov. 23, 1918.

"Subject: Contract No. 1498 for 250 3" Mark XI-2 anti-aircraft gun mounts. Cancellation of contract.

"SIRS:

"The Secretary of the Navy having authorized cancellation of the company's contract No. 1498 for 250 3" anti-aircraft gun mounts, the company is hereby directed to cease all work in connection therewith not later than December 2, 1918.

"A just and fair settlement will be made as provided by the terms of the contract and in accordance with the statute covering such cases. The details of settlement will be arranged with this bureau.

"The company is requested to submit all claims in detail at an early date. Such material as cannot be absorbed on the company's other contracts or in commercial work should be carefully inven-

toried and held for such disposition as may eventually be determined upon.

"Acknowledgment of receipt of this letter is requested.

"Very truly, yours,

"T. A. KEARNEY,
Acting.

"E. S. B.

"Russell Motor Car Co.,

"93 Dewey Ave., Buffalo, New York.

"(Via Naval Inspector of Ord., Homestead Steel Works
Munhall, Pa.)

(Indorsed: Naval inspector of ordnance, Russell Motor Car Co.
Nov. 30, 1918. Received and forwarded. C. F. Schmidt.)"

At said time on November 23, 1918, the plaintiff was ready and willing, and fully prepared to and could and would have completed and delivered the number of gun mounts and sights required of the kind and quality prescribed by contract 1498, if it had not been prevented from so doing by the United States and the Secretary of the Navy acting in its behalf.

At the time the said letter of November 23, 1918, was received the plaintiff had completed all engineering designing and drafting work and it had on hand or in course of delivery, all materials necessary to perform the contract No. 1498 in its entirety and had all necessary tools, dies, jigs, fixtures, machinery, and an adequate and efficient organization of employees, competent for the complete performance of the contract, being fully ready, able, and willing to carry out the terms of said contract on its part to be performed.

188 The engineering, designing, and drafting work above referred to was necessary as a preliminary to the performance of contract 949.

XI.

When contract 1498 was canceled no mounts had been delivered thereon, and contract 949 was not yet fully performed and was not so performed until approximately six months thereafter. At the time of said cancellation plaintiff was also handling contracts for adapters and fuse parts for the Army.

XII.

There were extended negotiations in attempted settlement of plaintiff's claim on account of the cancellation of contract 1498. The Acting Secretary of the Navy determined just compensation to be \$497,380.01 which, upon a rechecking of some items, was reduced to \$495,250.34, and offered settlement on that basis which was declined by the plaintiff. There was objection to the allowance made on some of the items embraced in the tendered settlement and particular objection to the refusal to make any allowance on account of anticipated profits and on March 6, 1920, plaintiff, by letter, in-

formed the Acting Secretary of the Navy that it had placed the matter in the hands of its attorneys with instructions to take proper steps for the collection of its claim. This suit was commenced November 20, 1920.

Thereafter, by letter dated March 17, 1921, after the commencement of this suit, the Assistant Secretary of the Navy informed the plaintiff "that after final checking and inventory of your records by the naval inspector of ordnance, the department has determined the just compensation due your company by reason of the cancellation of the contract to be \$444,847.68.

"As you have declined to accept the basis of settlement proposed by the department, you are entitled under the law to receive 75% of the just compensation as determined, which in this instance amounts to \$333,636.76. The partial payments heretofore made to you on this account aggregate \$243,820, leaving \$89,815.76 as the unpaid balance of 75%, and instructions have this day been issued to the Bureau of Ordnance to prepare public bill for this amount."

On March 30, 1921, the plaintiff acknowledged receipt of check for \$89,815.76 to make up 75% of the above award, and accepted same with the express stipulation that acceptance was without prejudice or the waiving of any rights or claims in proceedings then pending in this court.

And on April 4, 1921, the Acting Secretary of the Navy informed the plaintiff, in reply to its request, that the sum of \$444,847.68 determined upon as just compensation was made up of the following items:

| | |
|---|--------------|
| Raw materials, cost plus 10% | \$146,094.61 |
| Finished parts, relative contract value | 73,224.77 |
| Semifinished parts, relative contract value | 14,160.99 |
| Supplies at cost | 24,916.06 |
| Jigs, tools, and fixtures at cost less % of contract completion 4.44% | 26,383.77 |
| Office supplies at cost less salvage value | 1,208.28 |
| Subcontractors' claims at approved cost | 77,839.04 |

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| | |
|---|-------------|
| Equipment, facilities, and installation at cost less proportion assigned other contracts less salvage value less % of contract completion | \$10,495.25 |
| Machinery and equipment of cost less salvage value less % of contract completion | 21,453.10 |
| Packing and shipping charges at cost | 1,427.00 |
| Miscellaneous expenses as approved less % contract completion | 2,644.81 |
| Lump-sum cancellation allowance to cover incidentals not specifically ascertainable or allowed elsewhere . . . | 45,000.00 |

Total amount recommended in settlement . . . 444,847.68

XIII.

Plaintiff and defendant entered into a stipulation wherein and whereby defendant admits that there is due the plaintiff from the defendant on account of several items set forth therein the sum of \$360,931.46. The plaintiff does not admit therein that this is all there is due on account of said items. The stipulation is as follows:

"It is hereby stipulated and agreed by and between the attorneys for the respective parties to the above-entitled cause that the amounts claimed for the several items set forth in the amended petition filed in said cause November 20, 1920, shall be admitted as to the items and the amounts set forth below as proven and true, and the findings of fact by the court in this case may embrace said items and amounts with due allowance for deductions on account of salvage for machine-shop steel rejections, four (4) tons at fifteen dollars (\$15.00) amounting to sixty dollars (\$60.00), and because of amortization of eight-thirteenths ($\frac{8}{13}$) to contract No. 949 between the same parties on account of installation of electric craneway a deduction of twelve hundred and fifty-seven and ninety-four hundredths' dollars (\$1,257.94), and because of amortization of eight-thirteenths ($\frac{8}{13}$) to contract No. 949 on account of electric crane, a deduction of two hundred and fifteen and thirty-eight hundredths dollars (\$1,015.38) all said allowance for deductions amounting in the aggregate to twenty-three hundred and thirty-three and thirty-two hundredths dollars (\$2,333.32):

| | |
|--|--------------|
| Raw materials..... | \$132,525.11 |
| Finished parts..... | 47,873.00 |
| Semifinished parts..... | 11,154.82 |
| Supplies, tools, jigs, and fixtures..... | 52,525.77 |
| Office supplies..... | 1,208.32 |

Subcontractors' claims:

| | |
|-----------------------------------|-----------|
| Atlas Crucible Steel Co..... | \$108.06 |
| Wallace Barnes Company..... | 50.04 |
| Canada Forge Company..... | 3,008.84 |
| Canada Foundries & Forgings Co.. | 1,106.53 |
| Chase Metal Works..... | 1,480.21 |
| Cleveland Knife & Forge Co..... | 2,778.15 |
| Cochrane Brass Foundry Co..... | 4,182.89 |
| Jas. Graham & Company..... | 502.61 |
| Hammond Steel Company..... | 2,642.55 |
| National Tool Company..... | 54.10 |
| Otis Steel Company..... | 819.90 |
| Peerless Drawn Steel Company..... | 1,870.55 |
| Railway Steel Spring Co..... | 23,422.70 |
| Camden Forge Company..... | 3,624.31 |
| Superior Steel Castings Co..... | 32,187.60 |

Total subcontractors' claims.....

77,839.00

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| | | |
|--|-----------------|-------------|
| Rearrangement and alteration of plant | \$4,346.82 | |
| <i>Rearrangement and alteration of plant</i> | <i>4,346.82</i> | |
| In-tallation of machinery..... | 2,830.83 | |
| Installation of electric craneway.... | 2,044.16 | |
| Chipping shed..... | 246.83 | |
| Annealing furnace..... | 383.11 | |
| Addition to hardening department... | 247.97 | |
| Moving shed for storage of material.. | 378.94 | |
| Restaurant and equipment..... | 1,762.17 | |
| | | \$12,240.83 |
| Machinery and equipment..... | 78,263.50 | |
| Less salvage value..... | 54,978.25 | |
| | | 23,465.25 |

Packing and shipping:

| | | |
|--|----------|----------|
| Raw and semifinished materials..... | 1,286.56 | |
| Tools and fixtures..... | 126.51 | |
| Freight and cartage on steel returned from Can. Edrs. & Forg. Co..... | 13.93 | |
| | | 1,427.00 |

Miscellaneous expenses:

| | | |
|---|----------|----------|
| Premium in bond..... | 1,496.64 | |
| Insurance 12/1/18 to 11/30/19.... | 237.95 | |
| Traveling expense..... | 304.93 | |
| Telephone and telegrams..... | 55.46 | |
| Police and watchmen, 6/15/19- 12/31/19 | 910.67 | |
| | | 3,005.65 |

| | |
|------------------------------------|------------|
| Total account of expenditures..... | 363,264.78 |
| Deductions as above..... | 2,333.32 |

| | |
|--|------------|
| Admitted as due Russell Motor Car Company on account of several items set forth above.. | 306,931.46 |
|--|------------|

"It is hereby further stipulated and agreed by and between the attorneys for the parties in said cause that payments under contract No. 1498 have been made by the United States and received by Russell Motor Car Company in the amount of two hundred and forty-three thousand eight hundred and twenty dollars (\$243,820.00), but that there will be offered in evidence the original progress vouchers, papers, and checks upon which payments were made to comprise this sum, reference to same being set forth more in detail in paragraph 7th of the amended petition herein."

XIV.

Just compensation to the plaintiff company for the cancellation of said contract 1498 is \$455,250.34, which amount includes determined

allowance on account of raw materials purchased for the fulfillment of said contract with an added allowance for handling and other expenses in connection therewith, finished parts in their proportionate value to all the parts entering into a gun mount, cost of assembling not included, semifinished parts on the same basis, percentage of completion considered, supplies, tools, jigs and fixtures, subcontractors' claims paid, office supplies, rentals, amortization of special machinery purchased for the performance of this contract, installation of machinery, packing and shipping, miscellaneous expenses, and an additional allowance to cover possible contingencies not included in the itemization.

Plaintiff has received and is chargeable as against said amount the sum of \$333,635.76.

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XV.

The actual cost to the contractor of producing and delivering 25 gun mounts and sights under contract 1498, including all labor material, and overhead, and all expenses required to be borne by the contractor, including all contingent expenses which might reasonably have been incurred or which might reasonably arise out of its complete performance of contract 1498, was \$978,875.00, or a total cost each per gun mount and sight of \$3,915.50. Had the plaintiff been permitted to make and deliver the full quantity of gun mounts and sights called for by its contract 1498 at the contract price of \$7,860.00 each it could and would have earned and received a profit of \$960,416.32, or \$3,841.66 on each mount and sight, assuming the performance of the contract under existing conditions without unforeseen contingencies or deductions by way of liquidated damages or delays.

If the plaintiff is entitled to recover an account of anticipated profits in addition to the amounts included in just compensation in Finding XIV the amount it is entitled to recover on that account is \$726,120.15 reduced from the amount first stated above to that amount by reason of elements included in some of the items entering into just compensation as determined in Finding XIV.

XVI.

Just compensation as determined in Finding XIV does not include any allowance because of the fact that after the cancellation of contract 1498 the plaintiff was still required to complete contract 949 and could not, while manufacturing the mounts and sights for the completion of the contract last named, sell or dispose of its buildings, plant, or machinery or disband its organization, nor does it include profit on 25 mounts delivered in October and November on contract 949, which, but for the change in the schedule of deliveries, might have been delivered on contract 1498, nor does it include any allowance for the cost of maintaining an office at Buffalo, N. Y., during 1920 and 1921 for the closing up of its affairs.

Conclusion of Law.

On the facts found the court concludes as matter of law that the plaintiff is entitled to recover one hundred sixty-one thousand six hundred fourteen dollars and fifty-eight cents (\$161,614.58), as set out in Finding XIV, and that it is not entitled to recover as otherwise claimed, and judgment is directed for said sum of one hundred sixty-one thousand six hundred fourteen dollars and fifty-eight cents (\$161,614.58).

Opinion.

DOWNEY, Judge, delivered the opinion of the court.

The plaintiff's action is for the recovery of damages by reason of the cancellation of a contract for 250 aircraft gun mounts with sights, which was entered into between it and the United States on the 14th of May, 1918, the United States being represented in the execution of said contract by the then Acting Secretary of the Navy.

This contract took the number 1498 and will be so referred to.

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United States were seeking manufacturers competent to undertake the class of work involved in this and a previous contract and were recommended by the president of a concern then engaged for the United States in that line of work to the Russell Motor Car Company (Ltd.), a Canadian corporation which was then engaged in the manufacture of munitions for the British Government. It followed that the Canadian corporation took up the matter with representatives of the United States and was requested to submit a bid, which it did, and which in competition was found acceptable.

The fact that the bidder was a Canadian corporation caused some discussion, as a result of which it concluded to incorporate and acquire a plant in the United States for the purpose of the performance of the contract then in contemplation. It did incorporate in the United States under the laws of the State of Delaware, the Canadian corporation subscribing for a considerable proportion of its capital stock, and procured and equipped a plant at Buffalo, N. Y. It transferred from its Canadian plant sufficient men experienced in munitions manufacture to form the nucleus of an organization and by reason of the former experience of these men the plaintiff's organization in the United States was, no doubt, an efficient one at an earlier date than it could otherwise have been. We have found the facts with reference to this feature of the matter and mention them because we are requested to find them by the plaintiff and because upon them the plaintiff lays much stress in the presentation of its case; but we are of the opinion that they are wholly immaterial so far as the merits of the case are concerned. The contract then in contemplation was not the contract here involved but was a previous contract entered into on the 3d day of November, 1917, for the manufacture of 400 antiaircraft gun mounts and sights.

But aside from that feature of the matter it might reasonably be assumed that steps taken by the plaintiff toward the perfecting of an efficient organization were for its own benefit and that it incorporated in the United States and acquired its factory for the performance of said contract, not from any compulsion, or, so far as appears, from any patriotic motives inuring to the United States, but because it regarded it as advantageous from the standpoint of its own interest. It might be added that even though it does appear that the performance of this first contract was satisfactory so far as the character of the output was concerned the plaintiff company was not able to perform it within the time required by the contract but was the recipient of a very substantial extension of time.

Soon after the incorporation of the plaintiff company it, as suggested, entered into a contract with the United States for the manufacture of 400 antiaircraft gun mounts with sights at a contract price of \$8,462.00 each, deliveries to commence on or before May 1, 1918, and, following in stated numbers each month, to be completed on or before January 15, 1919.

The 250 gun mounts provided for by contract 1498, executed May 14, 1918, were to be of the same kind, character, and quality as those provided for in contract 949, but at the lesser price of \$7,860.00 each, the deliveries under said second contract numbered 1498 to commence on or before October 31, 1918, and to be completed by monthly deliveries on or before April 30, 1919. The first delivery, therefore, under contract numbered 949 was due on or before the day following the execution of contract numbered 1498.

It becomes important now to note in connection with scheduled deliveries and as bearing upon some questions presented and discussed by plaintiff that upon the 19th of September, 1918, the plaintiff, then being obligated under both contracts, each with its separate schedule of deliveries, requested, in writing, a modification of the schedule of deliveries, submitting a requested schedule to cover deliveries under both contracts, but with the stipulation that it should be permitted to apply all shipments of mounts on the first contract until the same was completed, and thereafter to follow with shipments upon the second contract. This schedule of deliveries found in Finding IX, contemplated the delivery of 5 mounts in June, 20 in July, and 40 in August, the three months preceding the requested change; 50 in September, the month in which the request for the change was preferred, and a completion of deliveries on both contracts in May, 1919. This amended schedule therefore delayed proposed early deliveries and extended the time for the completion of both contracts. The request of the plaintiff in this respect was granted by the Bureau of Ordnance, Navy Department, having charge of the matter, but it is to be remembered, in so far as the change affects any question for consideration herein, that it was solicited by the plaintiff and consented to by the defendant.

On November 23, 1918, the Acting Chief of the Bureau of Ordnance, Navy Department, informed the plaintiff that the Secretary of the Navy had authorized the cancellation of contract 1498 and

directed the plaintiff to cease all work in connection therewith not later than December 2, 1918. It is proper to be noted in this connection that at this time there had been no deliveries under contract 1498 and that contract 949, upon which all mounts were being delivered in accordance with plaintiff's request was not completed for several months thereafter.

The plaintiff contends that the cancellation of contract 1498 was wholly unauthorized and that it is therefore entitled to recover all damages resulting from said cancellation, in which it specifically includes a claim for the profits to be anticipated from the performance of said contract predicated upon the difference between what it alleges would have been the cost to it of the 250 gun mounts and the contract price. The defendant contends that the cancellation of the contract was authorized under the act of June 15, 1917 (40 Stat. 182), and that while the plaintiff under the provisions of said act is entitled to just compensation by reason of the exercised right of cancellation by the United States, it is not entitled to recover anticipated profits as a part thereof.

The act of June 15, 1917, was an act making appropriations to supply deficiencies in appropriations for the Military and Naval Establishments on account of war expenses. The provisions invoked by the defendant are found under the subhead "Emergency shipping fund" wherein, within the limits of the amounts authorized, the President is given certain powers with reference to placing orders for ships or material, requiring owners of plants to place their output at the disposal of the United States, requisitioning plants and ships, etc., among which is the power "(b) To modify, suspend, cancel, or requisition any existing or future contract for the building, production, or purchase of ships or material."

Provision follows, in case of the exercise of any of these powers by the President, for the making of just compensation to be determined by the President with a right, if the compensation fixed is unsatisfactory, to receive 75 per centum thereof and to sue under section 24, paragraph 20, and section 145 of the Judicial Code for such sum as added to said 75 per centum will make up such amount as will be just compensation, followed by a further provision that—

"The President may exercise the power and authority hereby vested in him, and expend the money herein and hereafter appropriated through such agency or agencies as he shall determine from time to time."

with a proviso not here material.

Following are provisions as to what shall be deemed to be included in certain words used in the act, among which it is provided that—

"The word 'material' shall include stores, supplies, and equipment for ships, and everything required for or in connection with the production thereof,"

and it is then provided that the authority granted to the President in the act or by him delegated shall cease six months after the final

treaty of peace is proclaimed between this Government and the German Empire.

On July 11, 1917, the President by Executive order directed that the United States Shipping Board Emergency Fleet Corporation and the Shipping Board directly, or, in its discretion, through the Fleet Corporation, should exercise certain of the powers delegated to him by said act and by a further Executive order of date August 21, 1917, he directed that the Secretary of the Navy should exercise all the powers vested in him by said act "in so far as applicable to and in furtherance of the construction of vessels for the use of the Navy and of contracts for the construction of such vessels, and the completion thereof, and all powers and authority applicable to and in furtherance of the production, purchase and requisitioning of materials for construction of vessels for the Navy and for war materials equipment, and munitions required for the use of the Navy, and the more economical and expeditious delivery thereof."

The Secretary of the Navy having directed the cancellation of the contract in question and prolonged negotiation looking to a settlement of the question of compensation having failed of their purpose and this suit having been instituted, an award was made in the sum of \$444,847.68 as "just compensation," as required by said act, and the plaintiff declining to accept said award in full of its claim, it was paid a sum which, with sums already paid, amounted to 75% of the award, all upon the theory on the part of the United States that the provisions above referred to of the act of June 15, 1917, were applicable, and in awarding "just compensation" prospective profits were excluded. The applicability of said act is disputed by the plaintiff and in its behalf it is contended that the power "to modify, suspend, cancel, or requisition any existing or future contracts for the building, production, or purchase of ships or materials" applied only to private contracts, and this contention requires at our hands a construction of the quoted provision in respect to its application, whether to private contracts alone or to Government contracts as well.

We have already had before us and passed upon the same question in *Meyer Scale & Hardware Company v. United States*, decided January 9, 1922. The conclusion of this court in that case was permitted to go unchallenged. But the fact that the same question is again raised, together with the reasonable assumption, aside from what we must know from our own docket, that it will be frequently involved by reason of war-time activities in the making, modifying, and canceling of contracts, renders the conclusion of far-reaching importance.

In the *Meyer Scales* case the question was elaborately and ably argued, much more in detail than is attempted in the instant case, and in our opinion we gave careful consideration to all phases of it, arriving at what we regarded as the only tenable conclusion and, under the circumstances, rather than content ourselves, on the one hand with a mere reference to that case, or on the other hand, attempting an independent discussion, we will restate here, with appro-

appropriate modification, the main features of our discussion of the question in the former case.

When language is not ambiguous extraneous aids to interpretation are neither necessary nor proper, but there are collateral matters, other acts, statements accompanying reports to Congress, debates, etc., which, because in a measure reverted to by counsel, we will refer to not because in our opinion they are a necessary resort, but because being cited in part by plaintiff we regard them in their entirety as strengthening our interpretation.

The words "modify," "suspend," "cancel" and "requisition" are each of plain, well-understood meaning and each has its proper function in the accomplishment of the purpose intended by the act. Combined, they cover the whole field of necessary operations so far as contracts were concerned, to the end that they might be so treated as should be found necessary to the accomplishment of governmental purposes. It is required that they be given their usual accepted meaning unless it satisfactorily appears that they were used in some other sense.

It was contended in the former case and may be again argued that the use of the word "requisition" is decisive of the meaning of the provision since this word could only apply to private contracts and not to contracts with the United States, but we may not properly resort to one word as determinative of the question when four are for consideration. No doubt "requisition" must find its application only to private contracts, since a conception of the Government attempting to requisition its own contract must be founded upon absurdity, but with equal assurance may it not be said that Congress never intended to do such an uncalled for and wholly unjustified thing as to authorize the "modification" of private contracts. The power and the purpose are equally beyond conception. Contracts must possess certain elements to give them life, and arbitrary modification without consent of parties would be impairment to the extent of destruction. The essential of mutual agreement to the same thing in the same sense would be destroyed and no

196 valid contract binding upon the parties would remain. A private contract might first be requisitioned and then modified to suit the purposes of the Government, but when thus modified it would, by virtue of the requisitioning, be the Government's contract.

If under some circumstances the words "suspend" or "cancel" might imply a power which the Government was authorized to exercise in respect to private contracts, it is plain that their natural application is to contracts to which the Government is a party and such application could scarcely be excluded from the scope of the legislation in the absence of any basis for the conclusion that such exclusion was intended.

The purpose and scope of the act in its entirety are for consideration and if, in the accomplishment of its purpose it is to be conceded that the powers conferred had application in part at least to private contracts, it is significant that the limitation put upon the exercise of the powers conferred extended over a period during which there

could be no possible occasion for their exercise except in connection with Government contracts.

It was provided that the authority granted should cease "six months after a final treaty of peace is proclaimed between this Government and the German Empire." Actual hostilities always cease some time before peace by treaty follows. The interim is usually covered by an armistice following the cessation of hostilities. Actual warfare having ceased under the terms of an armistice probably to be followed by a treaty of peace there could seem to be no reason for the further exercise of any of the granted powers so far as private contracts were concerned, since further subordination of private rights to the necessity of preparation for war was presumably unnecessary but the very circumstance which rendered unnecessary the exercise of any of these powers as to private contracts presented reasons for their exercise as to Government contracts. Hostilities having ceased, with every prospect that the war was over, the natural thing to do would be to first "suspend" contracts for war supplies and later, when circumstances justified it, to "cancel" contracts for unneeded supplies or, if circumstances justified, to cancel at once, and if, perchance, cancellation were not justified before the final accomplishment of peace six months thereafter were provided for the exercise of that power, and it seems impossible to conceive of any use to be made of any of the granted powers during this extended period except the power of cancellation and that necessarily as to Government contracts.

Indeed, the fact that the operation of the statute is extended to a period of six months beyond the proclamation of peace shows a recognition by Congress of the fact that the conditions we have mentioned could and possibly would arise and an intention to provide for them. Contracts, whether "existing or future," were brought within the scope of the legislation, and the power was given to modify or cancel them when there was no further need for a part of all of the things that furnished their consideration.

We are cited to the Congressional Record as sustaining plaintiff's theory that the language in question applied only to private contracts and we are particularly referred to a statement by the chairman of the Appropriations Committee on the floor of the House in which

197 he is quoted as saying that "There certainly could not be any taking over by the Government of its own contract. Such a statement would be impossible of performance." We have

already herein ventured to express the same opinion and that too without feeling that we were possessed of great erudition in doing so and we need not repeat. Nor need we go into a detailed consideration of the lengthy debates on this and kindred legislation. Much of it is but the expression of individual opinions, widely divergent, seldom indicative of careful consideration and binding, as a theory upon no one, but it seems to us that the history and purposes and scope of this class of legislation with such expressions as to its purpose as are proper for consideration, found not alone in the parts of the record cited but in the entire record, not only do not sustain plaintiff's deduction but to the contrary. They evidence a purpose

to grant every power to which there might be any possible occasion to resort and to err, if at all, by granting too largely rather than to take the responsibility of withholding any desired or possibly needed power.

While the act of June 15, 1917, is the act here under consideration and the only act relied upon, its construction and purpose is made additionally manifest by reference to the naval appropriation act of March 4, 1917, subhead "Naval Emergency Fund," 39 Stat. 1192. The process of evolution is significant. Two of the four words used in expressing powers granted with reference to contracts are found also in the latter act.

While this legislation was pending question arose as to progress being made under the then authorized ship building program and the Secretary of the Navy sent to the chairman of the House Committee on Naval Affairs a lengthy letter (Cong. Record, vol. 54, pt. 3, p. 2584), in which he reported fully on the status of the ship building program and the difficulties encountered in expediting it, and, apparently, to assist in meeting existing conditions and, as provided, to enable the securing of more economical and expeditious delivery of materials, etc., and construction of ships, power was given the President, in that bill, among other things, to "modify" or "cancel" any existing contract with power further to take possession of the factory of any contractor if he should refuse to comply with a contract as so modified, provisions which clearly, as in that act used, applied to Government contracts. The provision, however, was limited to "existing" contracts and the power granted was limited to March 1, 1918.

A comparison of the two acts renders it plainly apparent that the act of June 15, 1917, subhead "Emergency shipping fund," in so far as powers conferred upon the President is concerned, was modeled after the act of March 4, 1917. There is rearrangement with some modifications but the inclusion of the same subject matter with so much of the same phraseology could have resulted only from the use of one as a model for the other. Changes or additions therefore become significant. As passed in the Senate, the clause in the act of June 15, 1917, conferring power as to contracts contained the additional word "requisition" and it was made applicable to "future" as well as "existing" contracts. To words, therefore, plainly applicable in the naval bill to Government contracts only, and repeated in the act of June 15, 1917, was added a word having particular application to private contracts. In conference there was rearrangement of Senate provisions and, as to the contract clause, the word "suspend" was injected, the manager on the part of the House stating during consideration of the conference report that, "It gives power to suspend contracts as well as to cancel, modify, or requisition. In the Senate provision there was no authority to suspend a contract between private parties which might interfere with the Government requisitioning or requiring work to be done." It is true that the discussion on the floor of the House as to the effect of the addition of this word was addressed largely to its application to private contracts as to which there were widely divergent views both

as to the purpose and effect of and the power to enact such legislation, but there is nothing in the whole course of the legislation, even including the debates, justifying the conclusion that all the powers granted as to contracts were deemed applicable alone to private contracts. Rather, beginning with the original provision, used as a basis for the formulation of that in question, and considering the additions with the apparent purposes intended to be accomplished thereby, would it seem to have been the purpose to broaden powers already applicable to Government contracts and to so broaden them as to permit the exercise of any necessary power in relation to contracts of the character in question, either public or private.

It is not questioned that the subject matter of contract 1198 was within the purview of the act in question, that the power of the President in relation to such a contract was duly delegated to the Secretary of the Navy and that it was exercised by his direction through the proper administrative bureau of the Navy Department. If the provision of this act with reference to the modification, cancellation, etc., of contracts, applied to Government contracts, as we believe and hold that it did, it was a provision of existing law which must be read into the contract and the contract is to be treated, in determining the rights of the parties thereunder, as if a cancellation clause was written therein.

The act in question provides for compensation in case the Government shall exercise the power conferred as to canceling, modifying, suspending or requisitioning contracts, taking over plants, etc., and the measure is just compensation. Having the right, as we conclude, to cancel the contract, what is required to measure fully up to just compensation? Our theory necessarily excludes the idea of an award of damages as for a breach of the contract and substitutes therefor an award, pursuant to the statute, in compensation to the plaintiff for the exercise of a right accruing under the law and necessarily read into the contract requiring the treating of the contract as if a cancellation clause were written therein with a counter obligation to do justice by way of compensation in the event of the exercise of that right. In this view the authorities relied upon by the plaintiff are in large measure inapplicable.

The question of just compensation is, of course, before us *de novo* and not by way of confirmation or otherwise of the award made but the case is so presented upon the record, the discussion and such evidence as there is so addressed to the items of the award as made that the finding must necessarily be largely upon that basis. And

199 since our finding as to just compensation is the finding of an ultimate fact, unassailable unless the legal theory upon which it is predicated is erroneous, it seems not worth while to enter into a detailed discussion of the items involved, indicated in a general way in the findings, a perhaps unnecessary detail. Some general observations may, however, not be inappropriate, particularly in view of the trend of the discussion in some respects.

It is to be remembered that the preliminary work on the part of the plaintiff by reason of organization, acquisition and equipping of plant, etc., was all in anticipation, so far as appears from the record.

of the performance of the first contract, number 949, for 400 gun mounts and sights and that contract 1498 was not then in contemplation; that engineering, designing, and drafting and other work preliminary to and in preparation for manufacture of mounts were necessary in preparation for the performance of contract 949; that contract 949 was fully performed and the plaintiff was paid the full contract price for the 400 mounts, including, according to plaintiff's own showing, a very high percentage of profits and a release from any liability on account of delay in performance under the liquidated damage clause of the contract; that such new machinery as was afterward installed for the purpose of the performance of the contract 1498 was reimbursed for by an item included in the departmental award and in the finding herein made as to just compensation. It is also, as bearing particularly on two points argued by the plaintiff as to which, as shown in Finding XVI, there is an exclusion in the determination of just compensation, to be remembered that the change in the scheduled deliveries and the arrangement for the application of all mounts manufactured first upon contract 949 was at the solicitation of the plaintiff.

It is apparent from the record that there were prolonged negotiations for the purpose of arranging a settlement as between the plaintiff and the department. The proffers upon the part of the department were apparently unacceptable to the plaintiff and yet it must be said from the record that there was an apparent disposition upon the part of the department to treat liberally with the plaintiff to the end that there might be an adjustment of proper claims by reason of the cancellation of the contract 1498. The negotiations, offers, and countercontentions seem to justify the assumption that since the department was declining to consider anticipated profits as proper for allowance it was disposed to deal liberally with the plaintiff in other respects. We suggest this because there were items included in the determination of the department as to just compensation which were but scantily, if at all, supported by any facts appearing in the record and because while in some instances the plaintiff contended that the allowance was insufficient it has failed by any proof beyond mere general statements to establish either the insufficiency or the proper allowance in lieu of that tendered.

The department in its first detailed determination of just compensation found the proper amount to be \$497,380.01 which, upon a rechecking, it reduced to \$495,250.34, and significant of the attempts on the part of the department to arrive at an award acceptable to the plaintiff is the fact that having theretofore arrived at a lesser amount it appears that there was remaining a controversy as to certain items and that in furtherance of an attempt to reach a satisfactory conclusion the department incorporated in its itemization going to make up the amounts above stated an additional item of something over \$27,000.00 which it determined to be one-half of the amount apparently remaining in dispute. But the department continued to refuse to include anticipated profits upon the performance of the contract although its itemized determination did include some elements of profit and the plaintiff saw fit to reject the offer and institute this suit.

After the institution of the suit it is to be noted that the department then made a formal award of just compensation, accompanied by an itemized statement, set out in Finding XII, in which it reduced the amount from that stated above to \$444,847.68. But it is proper for observation in connection with this final award which involved this much of reduction from that formerly tendered that the record fails to show the reasons for this very considerable reduction in the amount which it had theretofore concluded was properly payable to the plaintiff as just compensation. We have fixed just compensation at the amount determined upon and tendered by the department next before the commencement of this suit, and even though in some respects it seems to savor of undue liberality, it must be regarded as having been determined upon in those respects by the department in the light of detailed information which to some extent is not furnished us by the record. An illustrative point as to the basis of plaintiff's objections, aside from the question of anticipated profits, is found in its objection made to the item with reference to raw materials taken at cost, with an additional ten per cent to cover expense of inspecting, handling, storing, etc.

This ten per cent allowance the plaintiff maintains was insufficient to cover the expenses incurred in connection with the handling, inspecting, storing, etc., of the raw materials, but its contention in that respect is, in general terms, without, so far as we are able to ascertain, any attempt to inform the court as to what the proper reimbursable expenses in that connection were. But without going into details as to the items either as to the basis upon which they were fixed or as to plaintiff's objections thereto, or as to the possible omission of some item which should have been included, although we are not cited to any such, it is to be observed that there is in that allowance a general item of \$45,000.00 denominated a cancellation allowance and to cover any items not specifically included. There is nothing in the record to justify any conclusion otherwise than that this amount additional to the specific items was amply sufficient to cover any possible contingency not included therein.

There are certain items suggested by the plaintiff as proper for consideration and allowance which are not included in our finding as to just compensation and, that the plaintiff may have the benefit of such contention as it sees fit to make with reference to those items we have specifically set out their noninclusion in Finding XVI. The plaintiff's contention as to the first of said items is that after the cancellation of contract 1498 the plaintiff was still required to complete contract 949 and while manufacturing the mounts and sights for the completion of that contract it could not dispose of its buildings, plant, or machinery or disband its organization and was damaged thereby.

201 The statement of the proposition would seem to carry its own answer. Assuredly so if the facts as found are borne in mind. The cancellation of contract 1498 had nothing whatever to do with the fact that the plaintiff was then required to continue the operation of its plant in order to complete its contract 949. The possibility might be suggested of a claim arising by reason of the cancellation of contract 1498 if that contract and the preceding con-

tract were running simultaneously so that the cancellation of one contract imposed an additional burden, as to overhead for example, upon the other contract. But the fact that the contracts were not being simultaneously performed, that contract 949 was not completed, and that notwithstanding the fact that all mounts made during this period were being delivered on contract 949 instead of apportioned to two contracts, the completion of contract 949 was yet delayed for several months, precludes the idea that any expense attendant upon the performance of contract 949 was due to or in any manner aggravated by the cancellation of contract 1498.

This and other questions presented by plaintiff are in some instances discussed as if the change in the original schedule of deliveries, separate as to each contract, and the application of all amounts upon contract 949 until its completion was a burden imposed upon the plaintiff by the United States, whereas the fact is as found and heretofore suggested that that change was solicited by the plaintiff and if it was in any manner disadvantageous—which, however, does not appear—the burden can not, therefore, under any circumstances be shifted to the defendant.

The next contention, as to which some things already said appertain, is as to the profits upon 25 mounts, 10 in October and 15 in November, delivered on contract 949 which, but for the change in the scheduled deliveries, might have been delivered on contract 1498 and which it is contended that the plaintiff is entitled to recover under contract 1498. The basis of such a contention is beyond our comprehension. It is proven that if the change in scheduled deliveries had not been made and permission had not been granted to apply all mounts on contract 949 until completed that these 10 mounts in October and 15 in November would have been delivered on contract 1498.

But in addition to the suggestion as to the responsibility of the plaintiff for the change in scheduled deliveries it is for consideration that all mounts manufactured during those months were delivered to the United States and that the plaintiff received upon said 25 mounts delivered under contract 949 a price in excess of that which it would have received had they been delivered upon contract 1498. The theory may possibly be that it would have had the benefit of these deliveries on contract 1498 and still have been permitted to complete contract 949, thus accomplishing an additional delivery of 25 mounts but facts already stated answer the contention. The third contention, excluded as shown in said Finding XVI, is based upon the cost of maintaining an office at Buffalo, N. Y., during 1920 and 1921 for the closing of its affairs. The claim is so apparently without foundation as an element of compensation growing out of the cancellation of contract 1498 that we do not deem it necessary to discuss it.

202 The amount determined upon and found fully measures the plaintiff's rights as to just compensation under our interpretation of those rights, but because of the plaintiff's claim therefor and request we have made a finding as to its profits to be anticipated from the performance of the contract measured by the difference between cost of production and contract price.

In this finding (XV) we have found the profits to be anticipated upon the basis of its own request supported by its own evidence which, while not without its inconsistencies and questionable accuracy, is the best available for the purpose. It shows the very hand some profit inhering in the contract and necessarily reflects that more than substantially the plaintiff must have profited under contract 949, for, while cost of manufacture may have been and probably was greater in the earlier stages of that contract, the contract price was higher by \$602.00 per mount or \$240,800.00 on 400 mounts, and since the claimed very large profit to be anticipated at the lesser price under 1498 is based upon cost of production in the latter stages of the performance of contract 949, there would seem to be no occasion for apprehension that the plaintiff's venture into the field of war-time production in the United States shall have been unprofitable if, to the liberal finding awarded it herein, we shall be unable, because of our view of the law and the rights of the United States thereunder, to award it a further need of profit for which it has performed no service in the earning.

Reverting to the finding on the subject, made as stated, it is to be observed that the amounts as stated are on the basis of a performance of the contract by the plaintiff for which it would be entitled to receive the contract price, the transaction in that event involving the assuming by the plaintiff of all the burdens of performance in return for its profits not otherwise augmented. But perchance the plaintiff should be entitled to recover on account of profits in addition to the amount found by us as just compensation; it is apparent that the amount must be reduced by reason of the inclusion in that compensation as found of some elements of profit, some burdens to be otherwise assumed by the plaintiff in the performance of the contract, and contingent allowances not otherwise proper for inclusion, and on this basis is finally found the amount properly to be awarded if the plaintiff should be so entitled.

In that connection it is further to be noted that plaintiff in its petition claims on account of the difference between alleged cost of production and contract price, referred to commonly as anticipated profits, the sum of \$951,232.50 and for other items set up in the following paragraph of its petition the sum of \$367,225.30. Since we conclude that there can be no recovery on account of anticipated profits it might be said, technically, that excluding that item there could be no recovery under the averments of the petition in excess of \$367,225.30, but since in the petition there is a general averment of a total damage of \$1,321,457.80 we have given it such liberal construction as is necessary to justify a judgment under this general averment for the amount of our finding as to just compensation.

Somewhat bearing upon this situation it is to be noted that in plaintiff's requested conclusion of law following its requested findings, it proceeds upon the theory of a total claim as stated above, made up of the sum of \$195,250.34, which we have found to be just compensation, and the items which we have rejected (Finding XVI) and anticipated profits. Assuming, therefore, that such rejections, heretofore referred to in detail, are just

fied and that plaintiff is not entitled to anticipated profits our finding as to just compensation fully meets its own requested conclusion from the facts.

If there were doubt in our minds as to the correctness of our conclusions on the question of claimed profits, it would be necessary to consider some other features as to the basis of recovery and to call attention particularly to the fact that the finding as to anticipated profits is based, as requested, upon the difference between the assumed cost of production and the contract price without any allowance necessarily to be made because of the contingencies and uncertainties of performance as well as results. And since it appears in this case that plaintiff did not perform its contract 949 within the contract period, and was the recipient of a liberal extension of time, and was already, before performance of contract 1498 had begun, soliciting an extension of time as to it, the possible reduction of profits by reason of the application of the liquidated damage clause of the contract would, with the many other contingencies, be for consideration.

If we are right in our conclusion earlier stated as to the proper construction of the act of June 15, 1917, and if, therefore, the law read into the contract gave the Government a right to cancel the contract, requiring only just compensation, the compensation required must necessarily have reference to conditions resulting from the exercise of a right and not involving a breach. Having awarded the plaintiff full compensation for all damages accruing up to the time and by reason of the cancellation of the contract is it required that there shall be added thereto the profit anticipated from the performance of the contract upon the same basis as if the cancellation were not a matter of right?

Considering the existent situation if the right to cancel, as expressed in the statute, had been actually written into the contract, and it was for construction, it is doubtful if such a contention would ever be seriously made. If it should be said that the contract gave the contractor the right to perform the entire contract with resultant profit the answer would be that the contract, necessarily with the consent of the contractor, gave the Government the right to terminate it at any desired stage during its performance, as a result of which any further rights thereunder, with resultant advantage to the contractor by way of profits, ceased. At that point, as by a distinct line of demarcation, the future is separated from the past and adjustment of rights on the basis of just compensation to the contractor has its proper field of operation behind and not beyond that line.

The particular act under discussion does not attempt to define the scope of "just compensation" but in one important act we find an expression of the legislative mind as to the basis of compensation under circumstances some of which are analogous to those with which we are dealing. The Dent Act (40 Stat. 1272) contemplates adjustment of contracts not formally executed, and it is provided—

"That in no case shall any award, either by the Secretary of War or the Court of Claims, include prospective or possible profits on any part of the contract beyond the goods and supplies

delivered to and accepted by the United States and a reasonable remuneration for expenditures and obligations or liabilities incurred in performing or preparing to perform said contract order."

This is, of course, not a Dent Act case, and we are not unmindful of the differences in the status of parties with or without properly executed contracts, but the purpose of that act was to relieve those complying or having prepared to comply with Government orders from informal contracts from the disabilities growing out of the fact that they were not then in possession of formally executed contracts and it authorized adjustment with them on a designated basis which Congress seemed "fair and equitable."

It is noted that plaintiff requests reconsideration of our conclusion in the Meyer Scale case and a following in this case of the holding in College Point Boat Corporation, theretofore decided. Counsel was probably not aware of the fact that the conclusions and judgment in the last-named case had been set aside and that the rule of the Meyer Scale case, restated here, is the rule of this court.

Our conclusion, we are confident, awards the plaintiff just compensation upon a basis embodying such elements of liberality as to preclude any possibility of inadequacy.

Hay, Judge; Graham, Judge; Booth, Judge; and Campbell, Chief Justice, concur.

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VI. *Judgment of the Court.*

At a Court of Claims held in the City of Washington on the Twenty-sixth day of June, A. D., 1922, judgment was ordered to be entered as follows:

The Court, upon due consideration of the premises, find in favor of the plaintiff, and do order, adjudge and decree that the plaintiff as aforesaid, is entitled to recover and shall have and recover of and from the United States the sum of One hundred and sixty-one thousand six hundred and fourteen dollars and fifty-eight cents (\$161,614.58).

By THE COURT

VII. *Plaintiff's Application for and Allowance of Appeal.*

Comes now Russell Motor Car Company, plaintiff in the above titled cause, by its attorneys, and prays an appeal to the Supreme Court of the United States from the judgment of this court, rendered on the 26th day of June, 1922.

KENEFICK, COOKS, MITCHELL &
BASS,

By LYMAN M. BASS,

Attorneys for Plaintiff.

Filed July 11, 1922.

Ordered: That the above appeal be allowed.

EDWARD K. CAMPBELL,

Chief Justice.

July 12, 1922.

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Court of Claims.

No. 34698.

RUSSELL MOTOR CAR COMPANY

VS.

THE UNITED STATES.

I, F. C. Kleinschmidt, Assistant Clerk Court of Claims, certify that the foregoing are true transcripts of the pleadings in the above-entitled cause; of the argument and submission of case; of the findings of fact, conclusion of law and opinion of the Court by Downey, J.; of the judgment of the Court; of the plaintiff's application for and allowance of an appeal to the Supreme Court of the United States.

In testimony whereof I have hereunto set my hand and affixed the seal of said Court at Washington City this Thirteenth day of July, A. D., 1922.

[Seal of the Court of Claims.]

F. C. KLEINSCHMIDT,
Assistant Clerk Court of Claims.

Endorsed on cover: File No. 29,035. Court of Claims. Term No. 485. Russell Motor Car Company, appellant, vs. The United States. Filed July 15th, 1922. File No. 29,035.

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